DME SWITCHER

DFS-300MF DFS-300P DFS-300PMF DFS-500 DFS-500MF DFS-500PMF

DIGITAL CHROMAKEYER

DCK-500 DCK-500P

PROTOCOL MANUAL
REMOTE (9pin) CONNECTOR
1st Edition

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OUTLINE

The communication specifications when the DME switcher DFS-300 and DFS-500 series and the digital chroma keyer DCK-500/P (abbreviated as DFS and DCK hereafter) are controlled from an editing controller and computer (abbreviated as controller hereafter) via a 9-pin editor terminal are described below.

The communication protocol of the DFS series conforms to the Sony switcher protocol. However, this communication protocol does not support all the commands defined by the Sony switcher protocol. The commands that DFS supports and their application are explained next.

1. SERIAL DATA CONFIGURATION

1-1. COMMUNICATION SYSTEM

D-Sub 9-pin

Conforms to RS-422A.

Synchronous system: Start-stop

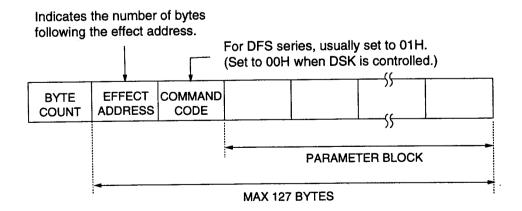
Baud rate: 38400 Character length: 8 bits

Parity: Odd Stop bit: 1

 START	D0	D1	D2	D3	D4	D5	D6	D7 (MSB)	PARITY	STOP BIT	(MAHK)
BIT	(LSB)							(MSB)		БП	 (SPACE)

1 START BIT + 8 DATA BITs + 1 PARITY BIT + 1 STOP BIT Odd Parity: The total of D0 to D7 and parity 1 is odd.

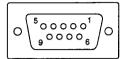
1-2. COMMAND CONFIGURATION



1-3. CONNECTION

EDITOR CONNECTOR

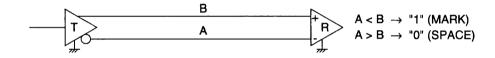
D-SUB 9pin (Female)



External View

Pin No.	Signal name	Function	
1	GND	Frame Ground	
2	XMIT-	Transmit "A"	
3	RCV+ Receive "B"		
4	GND	Receive Common	
5	NOT USED	Space	
6	GND	Transmit Common	
7	XMIT+ Transmit "B'		
8	RCV-	Receive "A"	
9	9 GND Frame Ground		

"A" and "B" are defined as shown below.



T: Transmit

R : Receive

2. COMMAND DESCRIPTION

The commands when the DFS-300 and DFS-500 series, and DCK-500 and DCK-500P (abbreviated as DFS and DCK hereafter) are controlled using a 9-pin editor terminal are described below.

The commands below are enabled for the following setting.

DFS-500 series: Set the editor select switch on the SY-172 board to BVE-900. DFS-300 series: Set the editor select switch on the SY-199 board to PVE-500.

DCK-500/500P: No setting is required.

A return code (ACK) is returned within 10 ms if a command is properly received when it is entered. Return code (ACK)

byte08 4 (R)

However, a return parameter (REGISTER READ or GROUP TALLY) is returned when a REGISTER READ command and GROUP READ command are sent.

To interrupt the effect, enter an ALL STOP command.

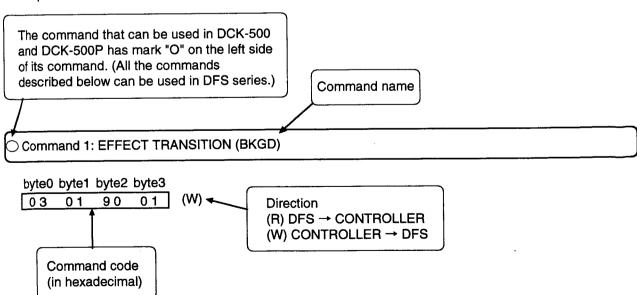
• Command 1: ALL STOP (EFFECT TRASITION)

• Command 2: ALL STOP (DSK TRASITION)

byte0 byte1 byte2 byte3
0 3 0 0 9 7 0 2 (W)

2-1. VIEWING THE TABLE

Example



2-2.CROSS POINT

O Command 1: BKGD A (PGM) BUS

byte0 byte1 byte2 byte3 0 3 0 1 8 0 X X (W)

Byte 3 (XX) status

0 1 : Video Input 1 0 2 : Video Input 2 0 3 : Video Input 3 0 4 : Video Input 4 Others : Internal Video

O Command 2: BKGD B (PST) BUS

byte0 byte1 byte2 byte3 0 3 0 1 8 1 X X (W)

Byte 3 (X X) status

0 1 : Video Input 1 0 2 : Video Input 2 0 3 : Video Input 3 0 4 : Video Input 4 Others: Internal Video

Function

: Selects the bus.

Command 1: Selects the cross point of a BKGD bus. Command 2: Selects the cross point of an FRGD bus.

Return code

: ACK

byte0

84 (R)

2-3.TRANSITION

2-3-1. Transition Mode Selection

○ Command 1: EFFECT TRANSITION (BKGD)

byte0 byte1 byte2 byte3

0 3 0 1 9 0 0 1 (W)

Command 2: DSK TRANSITION

byte0 byte1 byte2 byte3

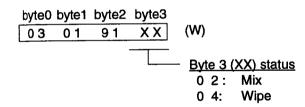
0 3 0 0 9 0 0 2 (W)

Function

: Specifies the effect transition or DSK transition.

2-3-2. Transition Type

○ Command: TRANSITION TYPE



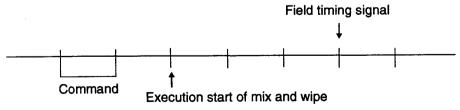
Function

: Selects the effect type.

Remarks

: The execution timing of Auto Transition Start varies depending on the effect type as

shown below.



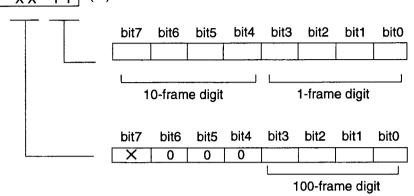
Return Code

: ACK

byte0 8 4 (R)

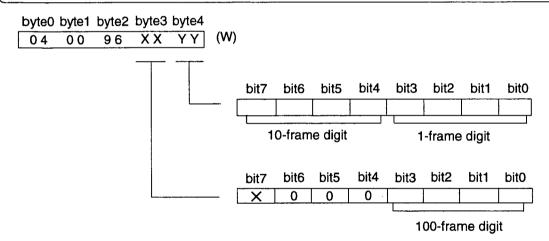
2-3-3.Auto Transition Start

O Command 1: AUTO TRANSITION START (EFFECT) byte0 byte1 byte2 byte3 byte4 0 4 0 1 9 6 X X Y Y (W)



Byte 3(XX) and byte 4(YY) represent the transition time in units of frames (decimal).

Command 2: AUTO TRANSITION START (DSK)



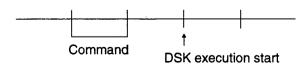
Byte 3(XX) and byte 4(YY) represent the transition time in units of frames (decimal).

Function

: Transition start

Remarks

: The execution timing of DSK is as shown below.



Return code

: ACK

byte0 8 4 (R)

2-3-4.All Stop

○ Command 1: ALL STOP (EFFECT TRANSITION)

byte0 byte1 byte2 byte3

0 3 0 1 9 7 0 1 (W)

Command 2: ALL STOP (DSK TRANSITION)

byte0 byte1 byte2 byte3

0 3 0 0 9 7 0 2 (W)

Function

: Stops the effect in execution.

2-4.DSK ON/OFF

Command1: DSK ON

byte0 byte1 byte2 byte3

0 3 0 0 D A 1 0 (W)

Command 2: DSK OFF

byte0 byte1 byte2 byte3

0 3 0 0 9 A 1 0 (W)

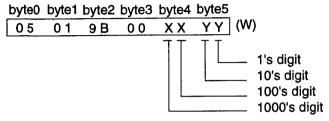
Function

: Turns on and off DSK.

2-5.WIPE

2-5-1.Wipe Pattern

O Command: WIPE PATTERN



Byte 4(XX) and byte 5(YY) represent the pattern number in decimal.

(Example)

The pattern number of Mix is 1080, and that of Cut is 1059.

Function

: Sets the wipe pattern.

Various effects can be set (including the 3D effect) by entering the pattern number.

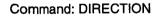
Return code

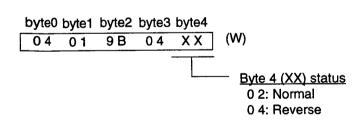
: ACK

byte0

84 (R)

2-5-2.Direction





Function

: Sets the wipe direction.

Return code

: ACK

byte0

84 (R)

2-6.FREEZE CONTROL

O Command 1: FREEZE ON

byte0 byte1 byte2 byte3

03 14 80 00 (W)

Command 2: FREEZE OFF

byte0 byte1 byte2 byte3

03 14 80 01 (W)

Function

: Sets the field freeze or frame freeze on the control panel to ON in advance. The freeze operation of a BKGD image can be turned on and off irrespective of the effect execution when the next command is sent from a 9-pin connector.

Remarks

: (For DFS-500 series)

Pattern number 9973 is set using the PATTERN/KEY PAD button on the control panel. After that, the freeze operation of an FRGD image can be controlled using the above command only when the effect of an animation type is set. To return a BKGD image to the freeze mode, enter pattern number 9971. During the power-on sequence and power reset, the system is initialized so that the BKGD image is frozen.

(For DFS-300 series)

Basically, same as the DFS-500 series.

In the DFS-300 series, the BKGD freeze and FRGD freeze can be selected by the pattern number described above or the setup menu. (For more details of the setup menu, refer to the Additional Functions of the DFS-300/300P (Operating Instructions.)

2-7. SNAP SHOT REGISTER

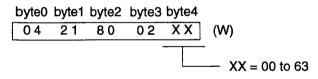
2-7-1. Configuration of Snap Shot Register

The DME switcher of DFS series has 100 snap shot registers of Nos. 00 to 99 (20 snap shot registers of Nos. 0 to 19 for DCK-500 and DCK-500P). One snap shot register consists of 16 groups. The number and size of groups used vary depending on the switcher model or the type of a parameter memorized in the snap shot. In this case, 16 groups are not all used. (In the DFS series, groups 1 and 2 or groups 1 to 4 are used.)

To upload or download the contents of the snap shot register in DFS and DCK to the controller, transfer data in units of this group. Therefore, the controller first issues a GROUP READ command to the DFS and DCK, views the contents of the group tally from the DFS and DCK, and specifies a valid group number so as to read the contents of snap shot data. To fetch the contents of the snap shot register that uses four groups (groups 1 to 4), the contents are read four times for each group.

2-7-2.Learn

Command: LEARN



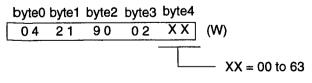
Byte 4(XX) represents the snap shot number in hexadecimal.

Function

: Registers the snap shot.

2-7-3.Recall



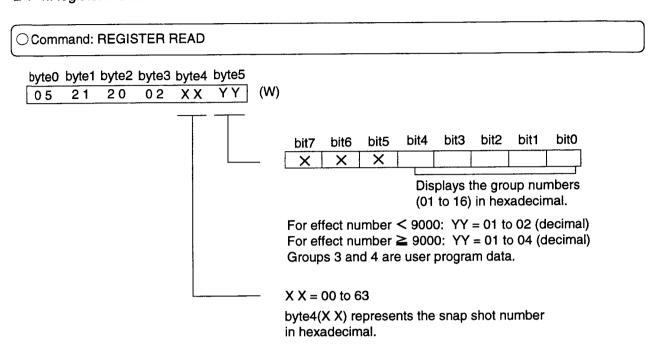


Byte 4(XX) represents the snap shot number in hexadecimal.

Function

: Calls the snap shot.

2-7-4.Register Read



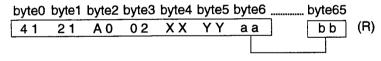
Function

: Reads the contents of the snap shot register.

DFS or DCK returns the return parameter (REGISTER WRITE) when a REGISTER READ command (the snap shot number is specified by byte4 and the group number is

specified by byte5) is issued to DFS or DCK.

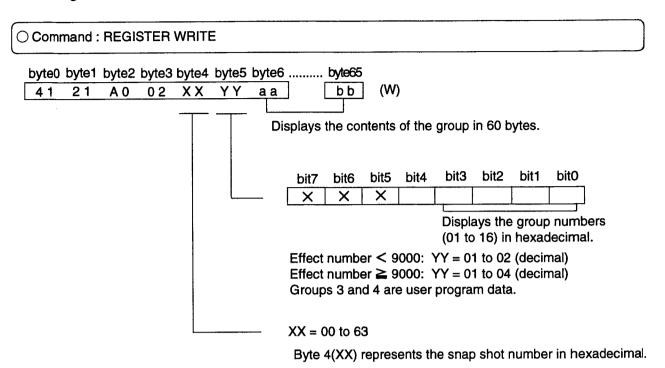
Return parameter: REGISTER WRITE



Displays the contents of the group in 60 bytes.

The contents of byte4 (XX) and byte5(YY) are the same as a REGISTER READ command.

2-7-5.Register Write

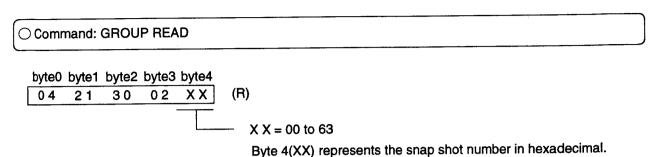


Function

: Writes the contents of the snap shot register. (The snap shot number is specified by byte 4, and the group number is specified by byte 5.)

Note

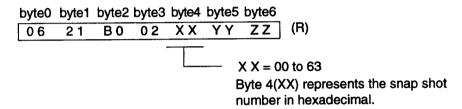
During write operation, data should be sequentially sent from group 1.



Function

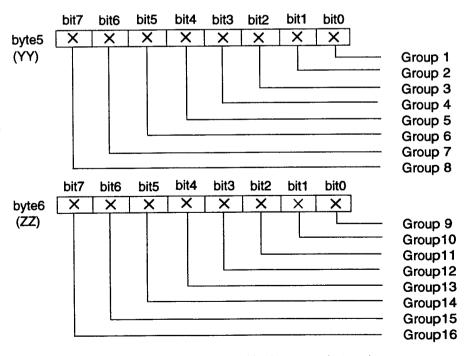
: Checks the block configuration of snap shot data. DFS or DCK returns the return parameter (GROUP TALLY) when a GROUP READ command (the snap shot number is specified by byte 4) is issued to DFS or DCK.

Return parameter: GROUP TALLY



Byte 5(YY) and byte 6(ZZ) indicate the valid group contained in the snap shot register that is specified by byte 4(XX).

For effect number \leq 9000: Byte 5(YY) = 03, Byte 6(ZZ) = 00 For effect number \geq 9000: Byte 5(YY) = 0F, Byte 6(ZZ) = 00

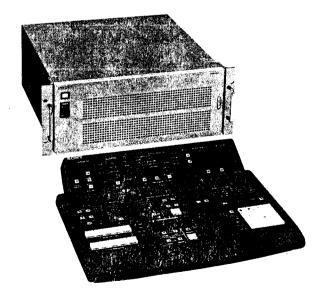


X = 1 indicated the valid group contained in the snap shot register.

DME SWITCHER

DFS-500 DFS-500P

SERVICE MANUAL



SAFETY CHECK-OUT

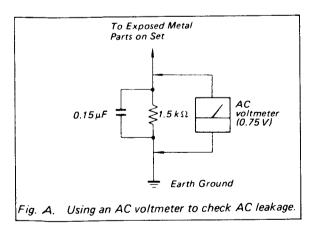
After correcting the original service problem, perform the following safety checks before releasing the set to the customer:

Check the metal trim, "metallized" knobs, screws, and all other exposed metal parts for AC leakage. Check leakage as described below.

LEAKAGE TEST

The AC leakage from any exposed metal part to earth ground and from all exposed metal parts to any exposed metal part having a return to chassis, must not exceed 0.5 mA. Leakage current can be measured by any one of three methods.

- A commercial leakage tester, such as the Simpson 229 or RCA WT-540A. Follow the manufacturers' instructions to use these instruments.
- 2. A battery-operated AC milliammeter. The Data Precision 245 digital multimeter is suitable for this job.
- 3. Measuring the voltage drop across a resistor by means of a VOM or battery-operated AC voltmeter. The "limit" indication is 0.75 V, so analog meters must have an accurate low-voltage scale. The Simpson 250 and Sanwa SH-63Trd are examples of a passive VOM that is suitable. Nearly all battery operated digital multimeters that have a 2V AC range are suitable. (See Fig. A)



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MY-54 Board	5-29
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DA-63 Board	5-41
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	- ^^
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BOARD LAYOUTS

PROCESS UNIT

^D-76 Board6-2 A/D Converter и м-29 Board6-4 Frame Synchronizer Y-54 Board6-6 Field Memory PU-78 Board6-8 Address Operation A-63 Board6-10 D/A Converter SY-172 Board6-12 System Control N-573 Board6-14 Connector Board MB-385 Board6-16 Mother Board CONTROL PANEL KY-223 Board6-18 Function Key /-225 Board6-20 Switch RAME......6-21 AC-111 Board (For EK) Line Filter KY-226 Board Positioner LE-55 Board Power Indicator VR-135 Board Location Control Title Control DSK (Down Stream Keyer) Control VR-136 Board Edge/Trail/Shadow Control VR-137 Board Mattes/BKGD Control VR-138 Board Effect Control

7. SEMICONDUCTOR PIN ASSIGNMENTS

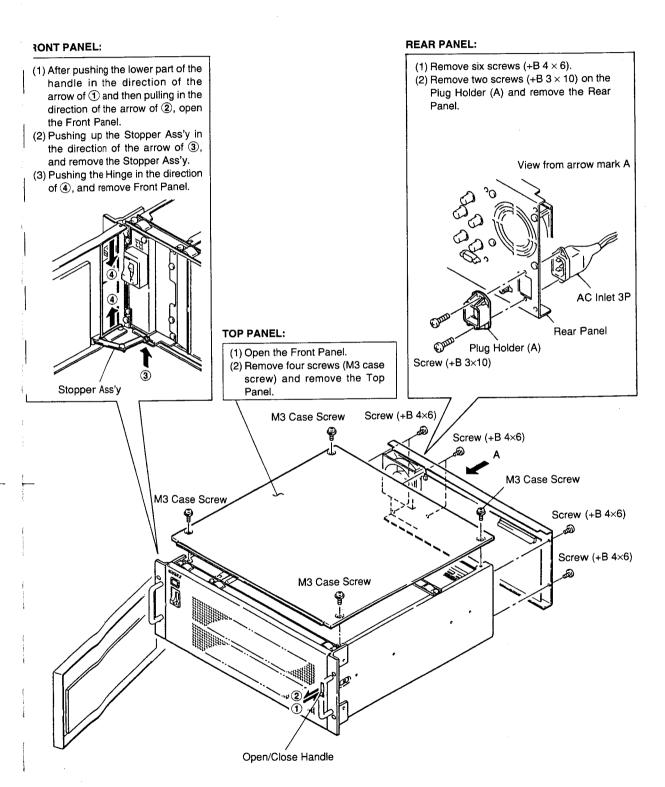
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SECTION 1 SERVICE INFORMATION

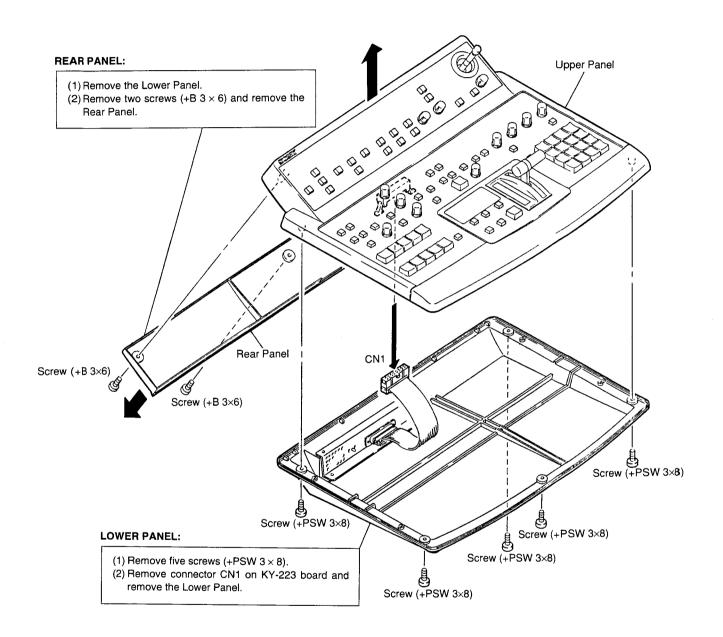


1-1. REMOVAL OF CABINET

PROCESS UNIT>



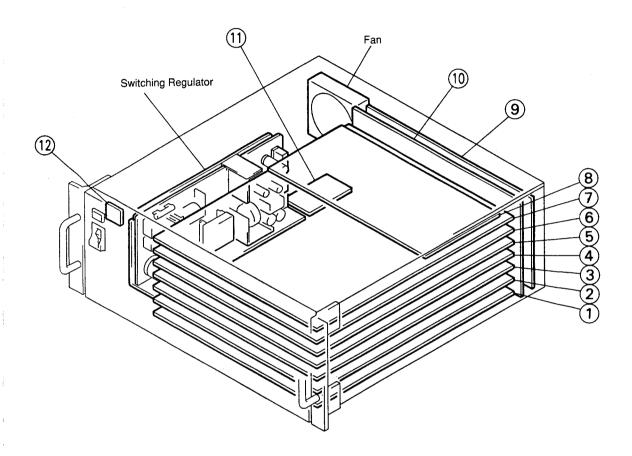
<CONTROL PANEL>





1-2. BOARDS LOCATION

PROCESS UNIT>



1. AD-76 Board : A/D Converter

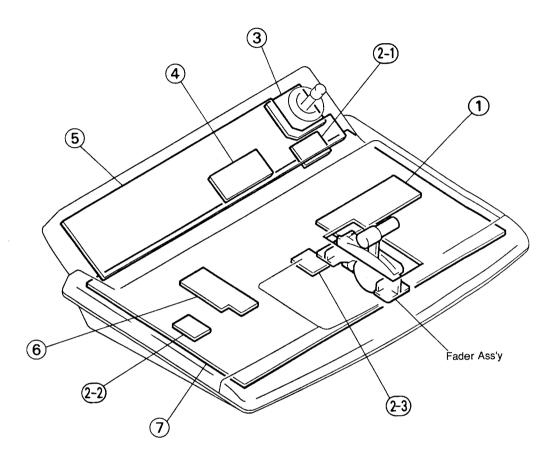
AD-76 Board
 SY-172 Board
 System Control
 FM-29 Board
 Frame Synchronizer
 PU-78 Board
 Address Operation
 MY-54 Board
 Field Memory
 VE-25 Board
 Lighting and Trail (option)

7. DA-63 Board : D/A Converter

8. DK-5 Board : DSK (Down Stream Keyer) (option) 9. CN-573 Board: Rear Panel Connector

0. MB-385 Board: Mother board 1. AC-111 Board : Line Filter (for EK) 12. LE-55 Board : Power Indicator

<CONTROL PANEL>



VR-138 Board: Effect Control
 VR-135 Board: Location Control
 VR-135 Board: Title Control

2-3. VR-135 Board: DSK (Down Stream Keyer) Control

3. KY-226 Board: Positioner

4. VR-136 Board: Edge/Trail/Shadow Control

5. KY-225 Board : Switch

6. VR-137 Board: Mattes/BKGD Control

7. KY-223 Board: Function Key



1-3. PRINTED CIRCUIT BOARD FUNCTION

) "SP Code" means Supply Code.

(2) "PCB" in the SP Code column means Printed Circuit Board, "MCB" in the SP Code column means Mounted Circuit Board.

<PROCESS UNIT>

3OARD	CIRCUIT FUNCTION	SP CODE	
AC-111	Line Filter (for EK)	O(PCB)	
\D-76	A/D Converter	O(MCB)	
ON-573	Rear Panel Connector	O(MCB)	
DA-63	D/A Converter	O(MCB)	
OK-5(*1)	DSK(Down Stream Keyer)	U	
FM-29	Frame Synchronizer	O(MCB)	
_E-55	Power Indicator	O(PCB)	
MB-385	Mother Board	O(MCB)	
√IY-54	Field Memory	O(MCB)	
PU-78	Address Operation	O(MCB)	
SY-172	System Control	O(MCB)	
√E-25(*2)	Lighing and Trail	U	

CONTROL PANEL>

CIRCUIT FUNCTION	SP CODE
Function Key	O(MCB)
Switch	O(MCB)
Positioner	O(MCB)
Location Control Title Control DSK(Down Stream Keyer) Control	O(PCB)
Edge/Trail/Shadow Control	O(PCB)
Mattes/BKGD Control	O(PCB)
Effect Control	O(PCB)
	Function Key Switch Positioner Location Control Title Control DSK(Down Stream Keyer) Control Edge/Trail/Shadow Control Mattes/BKGD Control

NOTE: (*1) DK-5 Board is Optional Board; BKDF-502.

(*2) VE-25 Board is Optional Board; BKDF-501.

1-4. REPLACEMENT OF BOARD

1-4-1. Plug-in Board Removing/Inserting

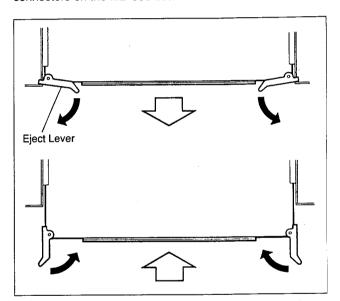
NOTE: In more than two seconds after turning the power on the Process Unit OFF and remove or insert the Plugin boards definitely (AD-76, DA-63, FM-29, MY-54, PU-78 and SY-172 boards). (If the board is inserted in a state of turning the power on, the fuse on the board has run out and the board can be not used.

Plug-in Borad Removing

Pull up the eject levers on the board in the direction of the arrow, and then remove the board from the connectors on the MB-385 board.

Plug-in Board Inserting

The eject levers pull up as shown in the figure, insert the board. After inserting the board, push down the eject levers in the direction of the arrow and connect certainly to the connectors on the MB-385 board.

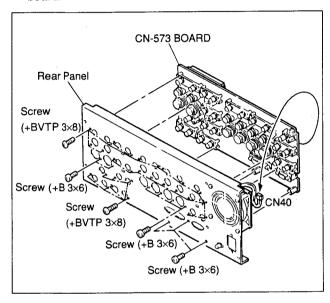


1-4-2. Board Replacement

<PROCESS UNIT>

CN-573 Board:

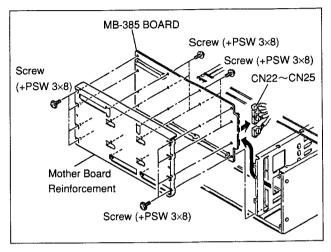
- ① Remove the rear panel. (Refer to "Section 1-1 REMOVAL OF CABINET" Rear Panel.)
- 2 Remove connector CN40 from the CN-573 board.
- 3 Remove thirty-seven screws (+BVTP 3×8 : twenty-eight screws/+B 3×6 : nine screws), and remove the CN-573 board.



(4) Replace a new one in the reverse procedure of steps (1) through (3).

MB-385 Board:

- 1 Remove all the Plug-in Boards.
- 2 Remove the rear panel. (Refer to "Section 1-1 REMOVAL OF CABINET" Rear Panel.)
- 3 Remove connectors CN22, CN23, CN24 and CN25 on the MB-385 board.
- 4 Remove eight screws (+PSW 3 \times 8), and remove the Mother Board Ass'y.
- (5) Remove eight screws (+PSW 3×8), and remove the MB-385 board from the Mother Board Reinforcement.

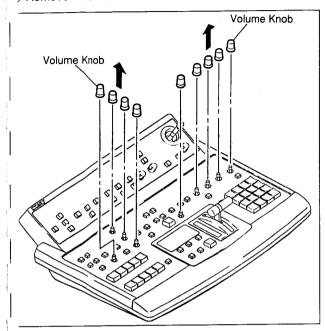


- (6) Install the Mother board Reinforcement to a new MB-385 board by eight screws (+PSW 3×8).
- \bigcirc Thread eight screws (+PSW 3 \times 8) to the Mother board Ass'y snugly but do not tighten.
- (8) Insert the DA-63 board into the No.1 slot and the AD-76 board into the No.7 slot and connect the connectors on the DA-63 and AD-76 boards to connectors on the MB-385 Borad.
- (9) Tighten the eight screws which is threaded snugly in step (7).

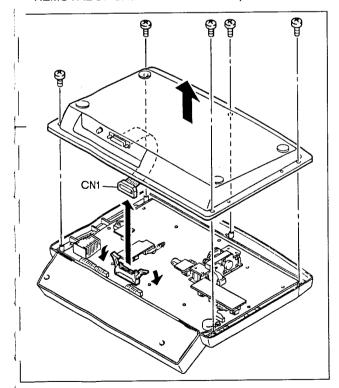


CONTROL PANEL> KY-223 Board:

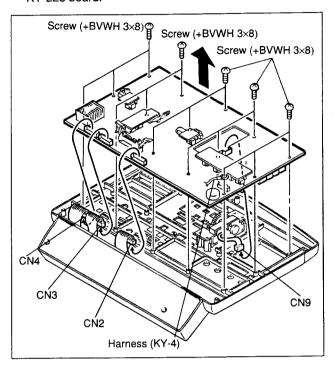
Remove nine volume knobs.



Remove the lower panel. (Refer to "Section 1-1 REMOVAL OF CABINET" Lower Panel.)



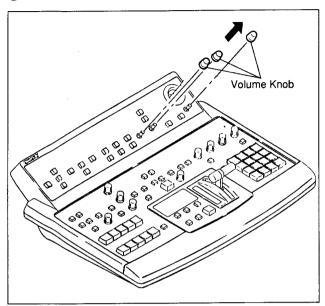
- 3 Remove connectors CN2, CN3, CN4 and CN9 on the KY-223 board. Remove one screw (+BVWH 3 \times 8) and remove the Harness (KY-4).
- (4) Remove fourteen screws (+BVWH 3×8) and remove the KY-223 board.



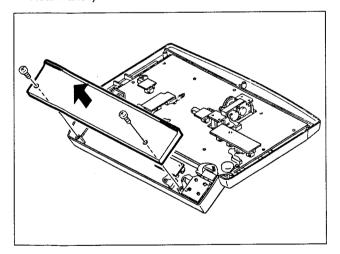
(5) Replace a new one in the reverse procedure of steps (1) through (4).

KY-225 Board:

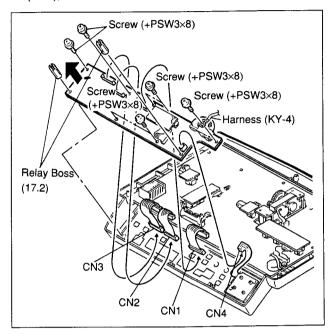
1) Remove three volume knobs.



② Remove the lower panel and the rear panel. (Refer to "Section 1-1 REMOVAL OF CABINET" Lower Panel and Rear Panel.)



- $\ \ \,$ Remove connectors CN1, CN2, CN3 and CN4 from the KY-225 board, and remove one screw (+B 3 \times 6) and remove the Harness (KY-4).
- 4 Remove six screws (+PSW 3×8) and two relay bosses (17.2), remove a new one.



(5) Replace a new one in the reverse procedure of steps (1) through (4).



1-5. REPLACEMENT OF SWITCHING REGULATOR

-5-1. Primary Circuit and Electric Shock

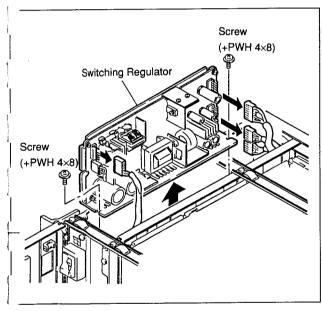
The most of the switching regulator is primary side circuit. ake care of an electric shock when removing the switching gulator for replacement or another reason.

1-5-2. Switching Regulator of Removal

OTE: When replacement of the switching regulator, be sure to turn the power OFF and start work.

REPLACEMENT PROCEDURE>

- Remove the top panel. (Refer to "Section 1-1 REMOVAL OF CABINET" Top Panel)
- (2) Remove three connectors and Harness.
-) Remove the Harness (AC Inlet) from the wire clamp.
- .) Remove two screws (+PWH 4 × 8).
- (5) Pull up the switching regulator.



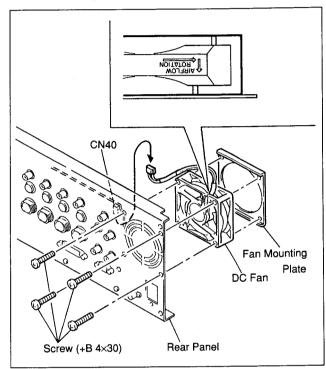
(6) Replace a new one in the reverse procedure of steps (1) through (5).

1-6. REPLACEMENT OF DC FAN MOTOR

NOTE: If the unit serves for about ten thousand times, the DC fan motor should be replaced.

<REPLACEMENT PROCEDURE>

- 1 Remove the rear panel Ass'y. (Refer to "Section 1-1 REMOVAL OF CABINET" Rear Panel.)
- 2 Remove connector CN40 on the CN-573 board. Remove four screws (+B 4 \times 30) and remove the DC fan motor.

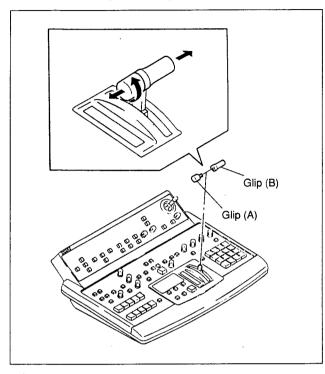


3 Install a new one in the direction of the arrow in the figure in the revers of steps 1 through 2.

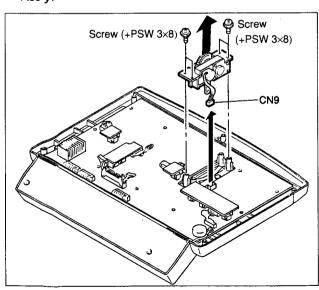
1-7. REPLACEMENT OF MAIN PARTS ON CONTROL PANEL

<FADER ASS'Y>

1) Remove the Grip A and Grip B.



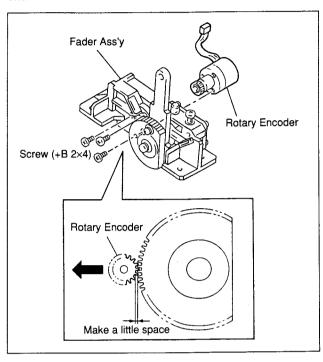
- 2 Remove the lower panel. (Refer to "Section 1-1 REMOVAL OF CABINET" Lower Panel.)
- 3 Remove connector CN9 on the KY-223 board. Remove four screws (+PSW 3 × 8) and remove the Fader Ass'y.



4 Replace a new one in the reverse of steps 1 through 2.

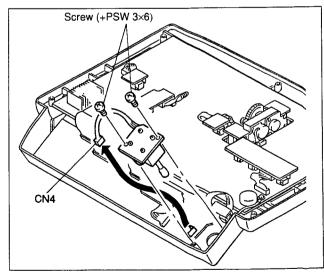
<POSITION ADJUTMENT of ROTARY ENCODER>

When replaceing a Rotary Encoder, adjust the lever for moving smoothly. Tighten three screws (+B 2 \times 4) of a new one.



<JOY STICK>

- ① Remove the lower panel and the rear panel. (Refer to "Section 1-1 REMOVAL OF CABINET" Lower Panel and Rear Panel.)
- 2 Remove connector CN4 on the KY-225 board. Remove two screws (+PSW 3 \times 6) and remove the KY-226 board with Joy Stick.



3 Replace a new one in the reverse of steps 1 through 2.



1-8. RACK-MOUNTING

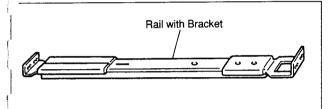
his unit can be mouted on an EIA Standard 19-inch rack. /hen mounting, be sure to use a support angle or slide rail.

 Recommended slide rail RMM-30 (SONY RACK MOUNT RAIL)

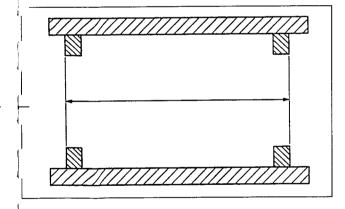
1-8-1. When Using RMM-30 (optional accessary)

ne unit can be mounted easily on the 19-inch standard rack y using one RMM-30(SONY Rack Mount Rail) for one unit.

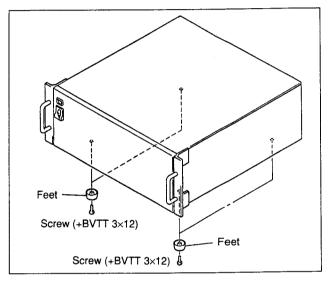
Component parts
 Rail with bracket
 Screw (+PWH × 10)
 × 2
 Plate nut M4
 Screw (+B 5×8)
 × 8



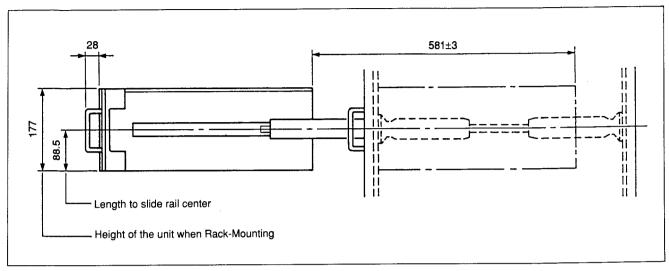
Usable rack
 One with a depth of 660 to 830 mm



- How to install
- 1) Remove four feet from the bottom of the unit.

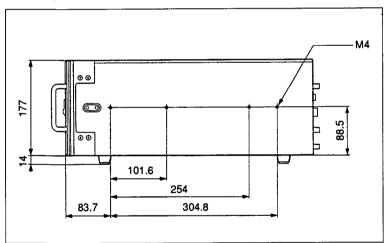


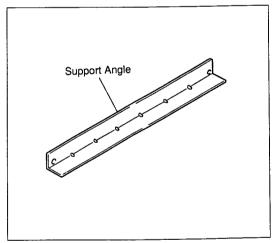
② Install the rack mounting rail. For details, refer to INSTALLATION MANUAL packed with the rack mounting rail RMM-30. • Maximum movable length of the DFS-500 is as follows.



1-8-2. In Cases When Other Than RMM-30 Is Used:

In cases when a support angle or a slide rail that is sold by rack makers is used, check the external dimensions of the unit and the slide rail mounting holes and mount it according to the instruction manual of each rack maker.



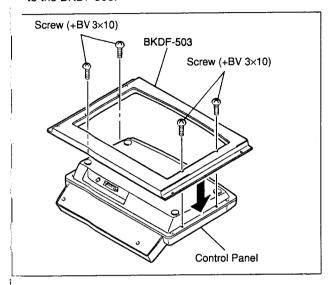




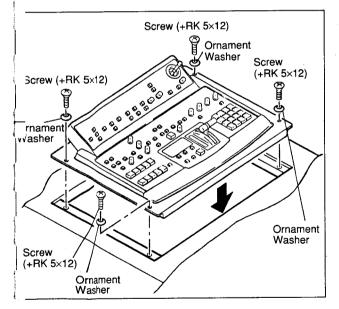
1-8-3. BKDF-503 Installation

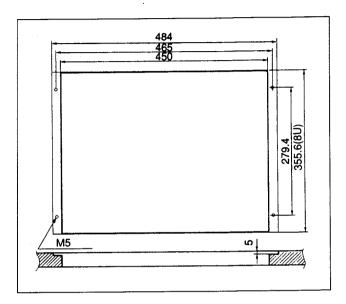
Install the BKDF-503, RACK MOUNT PANEL to the lower panel of the control panel.

Tighten the supplied accessary four screws (+BV 3×10) to the BKDF-503.



Fit the BKDF-503 into the adjustment desk. Tighten the supplied accessary four screws (+RK 5×12) and ornament washers (DIA.5) to the BKDF-503.





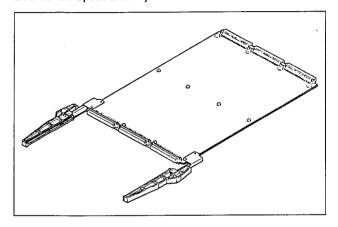
Dimension of installation hole on the adjustment desk

1-9. FIXTURES / MESURING INSTRUMENTS

1-9-1. Fixtures

Extension Board EX-326

Sony Part No. J-6186-940-A
Extension Board EX-326 is used for AD-76, DA-63, FM-29, MY-54, PU-78, SY-172 and VE-25 (BKDF-501/501P)
Boards to inspect and adjust.



PLCC IC Extraction Tool

Sony Part No. J-6035-070-A

This tool is used for extracion the PLCC ICs,. (Refer to "Section 1-14-3 Replacement of PLCC IC".)

25-pin Control Cable (5m)

Sony Part No. 1-575-065-11

This 25-Pin Control Cable is used for inspection and adjustment.

Connector Cable

Multi Connector Cable (DOBNC) Sony Part No. J-6031-830-A Multi Connector Cable (DIBNC) Sony Part No. J-6031-820-A

Video Cable (S-BNC)

Sony Parts No. J-6381-380-A

Standerd product

Spot Heater HS-600 (100 V)

HS-600 (117 V) HS-600 (220 V) HS-600 (240 V)

Nozzle

HS-616 (for HS-600) HS-619 (for HS-600)

These Spot Heater and Nozzle are used for extraction the ICs by warm wind after connecting the Spot Heater and the

For the above spot Heater and the Nozzle, please contact to the following.

Ikas.Inc

ADDRESS: Executive Center Suite 312, 21601 Devonshire

St., Chatsworth, CA. 91311, USA

TEL: 818-882-4116 FAX: 818-341-6466

Bielec:

ADDRESS: Valencia, 40, 08015 Barcelona, Spain

TEL: 34 3 226 44 87 FAX: 34 3 226 69 32

Scope Laboratories:

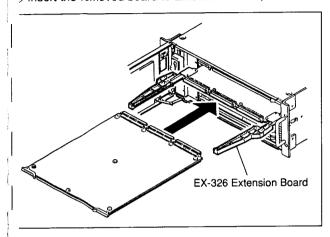
3 Walton Street, Airport West, Melbourne, Australia

TEL: (03) 338 1566 FAX: (03) 338 5675



1-9-2. Use of Extension Board

- Turn the power OFF. Open the front panel. Pull up the eject levers on the board and remove the board.
- Insert the Extension Board, EX-326 to the slot of the removed board in step ①.
- nsert the removed board to Extension Board, EX-326.



1-9-3. Mesuring Instruments

- Comosite Signal Generator
 Equivalent: TEK1410/textronix
- 2. Y/C signal Generartor Equivalent: TSG130/textronix
- 3. Component Signal Generator Equivalent: TSG300/textronix
- Waveform Monitor & Vectorscope (Composite)
 Equivalent: TEK1780R/textronix
- 5. Video Monitor Equivalent: PVM144Q/Sony
- 6. Oscilloscope Equivalent: 2445/textronix
- 7. Digital voltage meter Equivalent: 3435A/Hewlett Packard
- 8. Frequency counter Equivalent: 5315/Hewlett Packard

1-10. CONNECT OF SUPPLIED POWER CORD

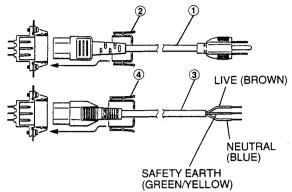
(UC)Requied, Parts

1 Power Cord 1-551-812-11 2 Plug Holder(Black) 2-990-242-01

(EK)Requied, Parts

③ Power Cord 1-590-910-11

4 Plug Holder(Gray) 3-170-078-01



1-11. MATCHING CONNECTOR/CABLE

When connecting cable to the connectors on the connector panel, match those connectors or equivalent with each other as listed below.

	DFS-500 side connector	Matching Con	nector or Cable	
Connector	Connector Function Name		Connector	Sony Parts No.
PGM OUT	COMPOSITE 1, 2 Y/C 1, 2 COMPONENT 1, 2	BNC S-VIDEO, Plug(F) Plug, 12(F)	BNC S-VIDEO, Plug(M) Plug, 12(M)	1-560-069-11 YC-30 V(3 m) 1-562-995-00
KEY OUT		BNC	BNC	1-560-069-11
BLACK BURST OUT	1, 2, 3, 4	BNC	BNC	1-560-069-11
DSK KEY IN	1, 2	BNC	BNC	1-560-069-11
DSK VIDEO IN	COMPOSITE/G/Y 1, 2 R/R-Y B/B-Y	BNC BNC BNC	BNC BNC BNC	1-560-069-11 1-560-069-11 1-560-069-11
VIDEO INPUTS	COMPOSITE 1, 2, 3, 4 Y/C 1, 2, 3, 4 COMPONENT 1, 2, 3, 4	BNC S-VIDEO, Plug(F) Plug, 12(M)	BNC S-VIDEO, Plug(M) Plug, 12(F)	1-560-069-11 YC-30 V(3 m) 1-562-159-00
EXT KEY IN		BNC	BNC	1-560-069-11
GEN LOCK IN	1, 2	BNC	BNC	1-560-069-11
T1/CUE		BNC	BNC	1-560-069-11
T2		BNC	BNC	1-560-069-11
CONTROL PANEL		D-SUB, Plug 25P(F)	D-SUB, Plug 25P(M)	(*)
EDITOR		D-SUB, Plug 9P(F)	D-SUB, Plug 9P(M)	1-560-651-00

^(*)This connector is attached to the cable of 10 m (1-696-660-11).



1-12. INPUT/OUTPUT SIGNALS OF CONNECTOR

PGM(Program)OUT COMPOSITE 1, 2

CONNECTOR: BNC

utput voltage: 1.0Vp-p (VBS), (Sync/burst: UC: 0.286Vp-p PAL: 0.3Vp-p)

utput impedance: 75Ω

PGM(Program)OUT Y/C 1, 2

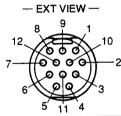
ONNECTOR: S(Separates) terminal 4pin Connector (Female)



Pin No	Signal Name	Function	Specification
1	Y GND	Ground of Luminance Output	Y terminal Output voltage: 1.0Vp-p (VS) (Y Video: 0.714Vp-p,Sync: 0.286Vp-p)NTSC
2	C GND	Ground of Chrominance Output	(Y Video: 0.7Vp-p,Sync: 0.3Vp-p)PAL Output impedance: 75Ω C terminal Output voltage: 0.681Vp-pNTSC
3	Y	Luminance Output	0.64Vp-pPAL (100/0/75/0 Color Bars) (Burst: 0.286Vp-p)NTSC
4	С	Chrominance Output	(Burst: 0.3Vp-p)PAL Output impedance: 75Ω

PGM(Program)OUT COMPONENT 1,2

ONNECTOR: Component Video Out 12pin Connector(Female)



Pin No	Signal Name	Function	Specification
1	Y OUT	Luminance Output	Output voltage: 1.0Vp-p (VS) (Y Video: 0.714Vp-p, Sync: 0.286Vp-p)NTSC
2	GND	Luminance Output Common	(Y Video: 0.7Vp-p, Sync: 0.3Vp-p)PAL Output impedance: 75Ω
3	R-Y	Chrominance R-Y Output	Output voltage: 0.756Vp.p.
4	GND	R-Y Output Common	Output voltage: 0.756Vp-p (100/0/75/0 Color Bars)NTSC 0.525Vp-p
5	B-Y	Chrominance B-Y Output	(100/0/75/0 Color Bars)PAL Output impedance: 75Ω
6	GND	B-Y Output Common	
7 thru 12			

)FS-500/500P

KEY OUT

CONNECTOR: BNC

Output voltage: 1.0Vp-p (Sync signal is nothing.)

Output impedance: 75Ω

BLACK BURST OUT 1,2,3,4

CONNECTOR: BNC

Output voltage: Sync: 0.286Vp-p Burst: 0.286Vp-p.....NTSC

Sync: 0.3Vp-p Burst: 0.3Vp-p.....PAL

Output impedance: 75Ω

DSK(Down Stream Keyer)KEY IN 1, 2

Through Out

(This connector is function to install the optional board, BKDF-502/502P.)

CONNECTOR:BNC

Input voltage: 0.7 through 1.0Vp-p (Sync signal is nothing)

or 1.0Vp-p (Sync: about 0.3Vp-p)

Input impedance: High impedance or 75Ω (with terminate a 75Ω ON/OFF switch)

DSK(Down Stream Keyer)VIDEO IN

(This connector is function to the optional board, BKDF-502/502P.)

CONNECTOR: BNC

① When the S102 DSK VIDEO SELECT of DA-63 board is "COMPOSITE" position.

Connector	Function	Specification
COMPOSITE/G/Y	Composite Input (Through out)	Input voltage: 1.0Vp-p (VBS), (Sync/Burst: 0.286Vp-p)NTSC (Sync/Burst: 0.3Vp-p)PAL Input Impedance: High impedance or 75Ω (with terminated 75Ω ON/OFF switch)
R/R-Y		
B/B-Y		



When the S102 DSK VIDEO SELECT of the DA-63 board is "Y/R-Y/B-Y" position.

Connector	Function	Specification
COMPOSITE/G/Y	Y: Luminance Input	Input voltage: 1.0Vp-p (VS), (Sync: 0.286Vp-p)NTSC (Sync: 0.3Vp-p)PAL Input Impedance: High impedance or 75Ω (with terminated 75Ω ON/OFF switch)
R/R-Y	Color differential signal R-Y: Chrominance Input	Input voltage: 0.756Vp-p (100/0/75/0 Color Bars)NTSC
B/B-Y	Color differential signal B-Y: Chrominance Input	0.525Vp-p (100/0/75/0 Color Bars)PAL Input impedance: 75Ω

$\ensuremath{\mathfrak{J}}$ When the S102 DSK VIDEO SELECTof the DA-63 board is "R/G/B" position.

Connector	Function	Specification
COMPOSITE/G/Y	G: RGB Signal G Input (with Sync)	Input voltage: 1.0Vp-p (G signal: 0.7Vp-p + Sync: 0.3Vp-p) Input impedance: High impedance or 75Ω (with terminated 75Ω ON/OFF switch)
R/R-Y	R: RGB Signal R Input	Input voltage: 0.7Vp-p
B/B-Y	B: RGB Signal B Input	Input voltage: 0.7 γρ-ρ Input impedance: 75Ω

VIDEO INPUTS COMPOSITE 1,2,3,4

CONNECTOR:BNC

Input voltage: 1.0Vp-p (VBS)

(Sync/Burst: 0.286Vp-p).....NTSC

(Sync/Burst: 0.3Vp-p).....PAL

Input impedance: 75Ω

VIDEO INPUTS Y/C 1, 2, 3, 4

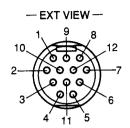
CONNECTOR:S(Separates) terminal 4pin Connector (Female)



Pin No	Signal Name	Function	Specification
1	Y GND	Ground of Luminance Input	Y terminal input voltage: 1.0Vp-p (VS) (Y Video: 0.714Vp-p, Sync: 0.286Vp-p)NTSC (Y Video: 0.7Vp-p, Sync: 0.3Vp-p)PAL
2	C GND	Ground of Chrominance Input	Input impedance: 75Ω C terminal input voltage: 0.681Vp-p (100/0/75/0 Color Bars)
3	Y	Luminance Input	(Burst: 0.286Vp-p)NTSC (Burst: 0.3Vp-p)PAL Input impedance: 75Ω
4	С	Chrominance Input	

VIDEO INPUTS COMPONENT 1, 2, 3, 4

CONNECTOR: Component Video In 12pin Connector(Male)



Pin No	Signal Name	Function	Specification
1	CPN Y	Luminance Input	Input voltage: 1.0 Vp-p (Y Video: 0.714Vp-p, Sync: 0.286Vp-p)NTSC
2	GND	Luminance Input Common	(Y Video: 0.7Vp-p, Sync: 0.3 Vp-p)PAL Input impedance: 75Ω
3	CPN V	Chrominance R-Y Input	
4	GND	R-Y Input Common	Input voltage: 0.756Vp-p (100/0/75/0 Color Bars)NTSC
5	CPN U	Chrominance B-Y Input	0.525Vp-p (100/0/75/0 Color Bars)PAL Input impedance: 75Ω
6	GND	B-Y Input Common	
7 thru 9			
10	GND	Ground	
11 thru 12			

EXT KEY IN

CONNECTOR: BNC

Input voltage: 0.7 through 1.0Vp-p (The voltage of Sync is nothing)

or 1.0Vp-p (Sync: about 0.3Vp-p)

Input impedance: 75Ω

GEN LOCK IN 1, 2 + Through Out

CONNECTOR: BNC

Input voltage: 0.43Vp-p (BB), (Sync/Burst: 0.286Vp-p) ...NTSC

(Sync: 0.3Vp-p Burst: 0.3Vp-p) ...PAL

Input impedance: High impedance or 75Ω (with terminated 75Ω ON/OFF switch)

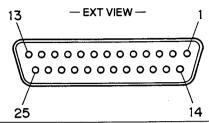
T1/CUE, T2

CONNECTOR: BNC Input voltage: TTL level Input impedance: 75Ω



CONTROL PANEL(PROCESS UNIT SIDE)

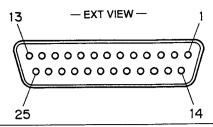
ONNECTOR: D-SUB 25P(Female)



Pin No	Signal name	Function	Specification
1	GND	Frame Ground	Definition of A and B
2	DC CON	12V Output	
3	KRD+	Receive Data "B"	
4	GND	Receive Common	
5	KTD+	Transmit Data "B"	
6	GND	Transmit common	
7	RVD+	Transmit VD "B"	
8 thru 11	NOT USED		
12	GND	Ground	
13	GND	Ground .	
14	DC CON	12V Output	G " B" + R
15	DC CON	12V Output	
16	KRD-	Receive Data "A"	
17	GND	Receive Common	A < B → "1" (MARK) A > B → "0" (SPACE)
18	KTD-	Transmit Data "A"	
19	GND	Transmit Common	
20	RVD-	Transmit VD "A"	
21 thru 24	NOT USED		
25	GND	Frame Ground	

CONTROL PANEL (CONTROL PANEL SIDE)

CONNECTOR: D-SUB 25P(Female)

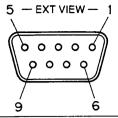


Pin No	Signal name	Function	Specification
1	FG	Frame Ground	Definition of A and B
2	+12 V	12 V Input	
3	MIT+	Transmit Data "B"	
4	GND	Transmit common	
5	RCV+	Receive Data "B"	
6	GND	Receive Common	•
7	RVD+	Receive VD "B"	
8	NOT USED		G " B" + R
9	+12 V PS	ICP PASS 12 V INPUT	
10	+12 V PS	ICP PASS 12 V INPUT	
11	NOT USED		$A < B \rightarrow $ "1" (MARK) $A > B \rightarrow $ "0" (SPACE)
12	GND	Ground	
13	GND	Ground	
14	+12 V	12 V Input	
15	+12 V	12 V Input	
16	MIT-	Transmit Data "A"	
17	GND	Transmit Common	
18	RCV-	Receive Data "A"	
19	GND	Receive Common	
20	RVD-	Receive VD "A"	
21 thru 24	NOT USED		
25	FG	Frame Ground	



EDITOR CONNECTOR

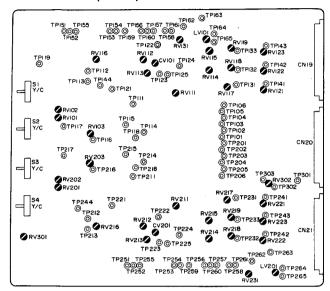
ONNECTOR: D-SUB 9P(Female)



Pin No	Signal name	Function	Specification
1	GND	Frame Ground	Definition of A and B
2	XMIT-	Transmit "A"	
3	RCV+	Receive "B"	
4	GND	Receive Common	"в" +
5	NOT USED		G "A" R
6	GND	Transmit Common	, , , , , , , , , , , , , , , , , , ,
7	XMIT+	Transmit "B"	A < B → "1" (MARK)
8	RCV-	Receive "A"	A > B → "0" (SPACE)
9	GND	Frame Ground	

1-13. EXPLAIN OF SWITCH/INDICATOR/ VOLUME

AD-76 BOARD (A side)



Volume

CV101(C7): A COLOR F LOCK trimmer capacitor

Adjust the A-CH chroma decoder color lock.

CV201(L7): B COLOR F LOCK trimmer capasitor

Adjust the B-CH chroma decoder color lock.

LV101(B10): A VFO BIAS coil

Adjust the A-CH VFO control voltage

centering.

LV201(N13): A VFO BIAS coil

Adjust the B-CH VFO control voltage

centering.

RV101(E2): A CPST Y GAIN control

Adjust the A-CH Y gain of the composite input.

RV102(E2): A CPST C GAIN control

Adjust the A-CH chroma level of the

composite input.

RV103(F4): A APC LOCK control

Adjust the A-CH burst lock of the digital Y/C

separated clock.

RV111(D8): A SEP Y GAIN control

Adjust the A-CH S input Y gain.

RV112(C7): A SEP C GAIN control

Adjust the A-CH chroma S input gain.

RV113(C7): A CPST & SEP HUE control

Perform the HUE adjustment of the A-CH

composite signal and the S input signal.

RV114(C10): A CPST & SEP R-Y GAIN control

Adjust the A-CH R-Y gain of composite signal

and the S input signal.

RV115(B10): A CPST & SEP B-Y GAIN control

Adjust the A-CH composite signal and the S

input B-Y gain.

RV116(C4): A INT BURST LEVEL control

Adjust the internal genaration burst level when

the A-CH is no signal.

RV117(D11): A CPNT Y GAIN control

Adjust the A-CH Y gain of component input.

RV118(C11): A CPNT R-Y GAIN control

Adjust the A-CH R-Y gain of component input.

RV119(B11): A CPNT B-Y GAIN control

Adjust the A-CH B-Y gain of the component

input.

RV121(D12): A Y DC control

Adjust the A-CH Y pedestal DC of the A/D

converter.

RV122(C12): A R-Y DC control

Adjust the A-CH R-Y DC of the A/D converter.

RV123(B12): A B-Y DC control

Adjust the A-CH B-Y DC of the A/D converter.

RV131(B9): A W HD PHASE control

Adjust the A-CH H timing of the memory

writing.

RV201(J2): B CPST Y GAIN control

Ajust the B-CH Y gain of the composite input.

RV202(H2): B CPST C GAIN control

Adjust the B-CH chroma level of the

composite input.

RV203(H4): B APC LOCK control

Adjust the B-CH burst lock of the digital Y/C

separater clock.

RV211(K8): B SEP Y GAIN control

Adjust the B-CH Y gain of the S input signal.

RV212(L7): B SEP C GAIN control

Adjust the B-CH chroma gain of the S input

signal.

RV213(L7): B CPST & SEP HUE control

Perform the HUE adjustment of the B-CH

composite signal and the S input signal.

RV214(L10): B CPST & SEP R-Y GAIN control

Adjust the B-CH R-Y gain of the composite

signal and the S input signal.

RV215(K10): B CPST & SEP B-Y GAIN control

Adjust the B-CH B-Y gain of the composite

signal and the S input signal.

RV216(K4): B INT BURST LEVEL control

Adjust the internal genaration burst level when

the B-CH is no input signal.

RV217(J11): B CPNT Y GAIN control

Adjust the B-CH Y gain of the component

input signal.

RV218(L11): B CPNT R-Y GAIN control

Adjust the B-CH R-Y gain of the component

input signal.

RV219(K11): B CPNT B-Y GAIN control

Adjust the B-CH B-Y gain of the component

input signal.

RV221(J12): B Y DC control

Adjust the B-CH Y pedestal DC of the A/D

converter.



DV222(K12): B R-Y DC control

Adjust the B-CH R-Y DC of the A/D converter.

V223(L12): B B-Y DC control

Adjust the B-CH B-Y DC of the A/D converter.

RV231(N12): B W HD PHASE control

Adjust the B-CH H timing of the memory

writing.

V301(L1): EXT KEY CLIP control

Adjust the slice level of the TITLE (EXT KEY)

input signal.

V302(J13): EXT KEY DELAY FINE control

Preform fine adjustment of the TITLE (EXT

KEY) delay vlaue.

witch

51(D1): VIDEO INPUT1 S2(F1): VIDEO INPUT2 3(H1): VIDEO INPUT3

4(K1): VIDEO INPUT4

(Input signal format selection) switch

Select the format of the signal for connecting to

the VIDEO INPUTS connectors 1 through 4. COMPOSITE: composite video signal

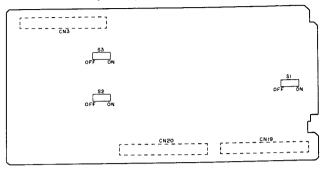
Y/C: Y/C video signal

COMPONENT:component video signal

When the unit is shipped, all of the switches are

set to the COMPOSITE position.

CN-573 BOARD (A side)



Switch

S1(E3): 75Ω terminated switch

This switch is GEN LOCK INPUT 75 Ω terminated

switch

When the unit is shipped, this switch is set to the

ON position.

S2(B3): 75Ω terminated switch

This switch is DSK VIDEO INPUT 75Ω terminated

switch.

When the unit is shipped, this switch is set to the

ON position.

S3(B2): 75Ω terminated switch

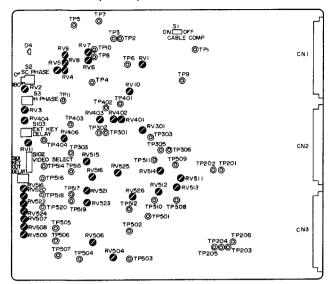
This switch is DSK KEY INPUT 75Ω terminated

switch.

When the unit is shipped, this switch is set to the

ON position.

DA-63 BOARD (A side)



Indicater

D4(B14):

GEN LOCK IN indicater (red)

This indicator shows if the external synchronizing signal (the black burst signal) is input to the GEN LOCK IN connector on the rear panel.

ON (Red light):

GEN LOCK mode lights red when the external synchronizing signal (the black burst signal) is input to the GEN LOCK IN connecotor on the rear panel.

The synchronizing signal generator of this unit synchronizes to external synchronizing signal

automatically.

OFF (light off):

Lights off when the external synchronizing signal (the black burst signal) is not input to the GEN LOCK IN connector on the rear panel. The synchronizing signal generator of this unit is the

internal oscillator.

Volume

RV1(B8): INT SC FREQUENCY control

Adjust the SC frequency when internal signal oscillation of synchronized signal generator

on this board.

RV2(D14): GEN LOCK SC PHASE FINE control

Perform the fine adjustment of the SC phase

when the external synchronization.

RV3(E14): GEN LOCK H PHASE FINE control

Perform the fine adjutment of the H phase

when external synchronization.

RV4(C12): INT CLAMP PULSE PHASE control

Adjust the phase of the internal generation

1-26 clamp pulse.

RV5(C12): INT CLAMP PULSE WIDTH control

Adjust the width of the internal generation

clamp pulse.

RV6(B11): PGM OUT (COMPOSITE,Y/C, COMPO-

NENT) BLANKING WIDTH control

Adjust the blanking width of PGM OUT

(COMPOSITE, Y/C, COMPONENT).

RV7(B11): PGM OUT (COMPOSITE, Y/C, COMPONENT) BLANKING PHASE control

Adjust the blanking phase of PGM OUT

(COMPOSITE,Y/C, COMPONENT).

RV8(B12): BURST WIDTH control

Adjust the burst width of PGM OUT

(COMPOSITE, Y/C) and B.B OUT.

RV9(B12): BURST PHASE control

Adjust the burst phase on PGM

OUT(COMPOSITE,Y/C) and B.B OUT.

RV10(D9): INT SC PHASE control

Adjust the SC phase when the internal

oscillation of synchronized signal generator

on this board.

RV11(F14): DSK EXT KEY CLIP control

Adjust the clip level of signal for connecting

the DSK KEY IN connector.

When the unit is shipped, this volume is set to

the mechanical center position.

RV301(E8): ENCODER MODURATION AXIS control

Adjust so that the moduration are axes (the R-Y axis and the B-Y axis) are crossed prependicularly by encoding the PGM OUT

(COMPOSITE, Y/C) and B.B OUT.

RV401(E9): B.B OUT BURST BALANCE control

Adjust so that the burst level of every B.B OUT

line is same level.(for EK)

RV402(E10): B.B OUT SUB CARRIER LEAK BALANCE (B-

Y) control

Adjust the sub carrier balance of the B.B OUT

encoder B-Y axis.

RV403(E10): B.B OUT SUB CARRIER LEAK BALANCE(R-

Y) control

Adjust the sub carrier balance of the B.B OUT

encoder R-Y axis.(for EK)

RV404(E14): B.B OUT GAIN control

Adjust the gain value of the B.B OUT.

In fact this control is matched by burst level.

RV406(F12): B.B OUT SYNC LEVEL control

Adjust the sync level of the B.B OUT.

RV504(L10): PGM OUT(COMPOSITE, Y/C) SYNC LEVEL

control

Adjust the sync level of the PGM

OUT(COMPOSITE, Y/C).

RV506(L11): PGM OUT(COMPOSITE, Y/C) CHROMA

GAIN control

Adjust the chroma gain value of the PGM OUT

(COMPOSITE, Y/C).

In fact the volume is matched by level of the R-

Y axis.

RV507(K14): PGM OUT(COMPOSITE) GAIN control

Adjust the gain value of the PGM

OUT(COMPOSITE).

In fact the volume is matched by the

luminance level.

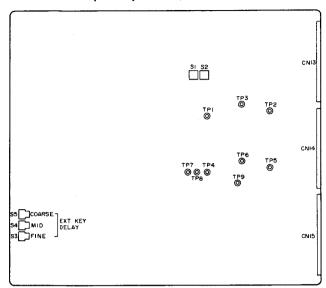
DFS-500/500P



RV526(H9): PGM OUT(COMPOSITE, Y/C)Y/C DELAY nV508(K14): PGM OUT(Y/C)Y GAIN control Adjust the gain value of the PGM OUT (Y/C) control Adjust the delay value of the PGM luminance signal(Y). OUT(COMPOSITE, Y/C) luminance signal (Y) V509(K14): PGM OUT(Y/C)C GAIN control corresponding to the chroma signal(C). Adjust the gain value of the PGM OUT(Y/C) In fact turn this volume the middle of left fully chroma signal(C). PGM OUT(COMPOSITE,Y/C)SUB CARRIER and mechanical center. √511(H7): Switch LEAK BALANCE(R-Y) control CABLE COMPENSATION ON/OFF switch Adjust the sub carrier balance of the PGM S1(A7): This switch is the GAIN lower compensation OUT(COMPOSITE, Y/C) encoder R-Y axis. for the long cable. V512(H8): PGM OUT(COMPOSITE, Y/C) B-Y AXIS ON: The GAIN of the input signal (GEN LOCK **GAIN** control signal) rises about 6dB. Adjust the gain value of the PGM OUT When the unit is shipped, this switch is set to (COMPOSITE,Y/C) encoder B-Y axis. PGM OUT (COMPOSITE, Y/C) BURST the OFF position. V513(H7): GEN LOCK SC PHASE COARSE S2(C14): **BALANCE** control (0° 180°)switch Adjust so that the burst level of every PGM Change the setting reverses the external sync OUT line (COMPOSITE,Y/C) is same level. SC phase by about 180°. When the unit is shipped, this switch is set to PGM OUT(COMPOSITE, Y/C) SUB CARRIER RV514(H8): the "0°" position. LEAK BALANCE(B-Y) control GEN LOCK H PHASE COARSE ADJ. switch S3(D14): Adjust the sub carrier balance of the PGM Perform the tentative adjustment of external OUT (COMPOSITE,Y/C) encoder B-Y axis. sync H phase. RV515(G11): KEY OUT DELAY FINE control The H phase can be changed in sixteen steps Perform the fine adjustment of the delay value with units of about 280ns. of the KEY OUT. in fact turn this volume mechanical center. When the unit is shipped, this switch is set to RV516(H14): KEY OUT GAIN control the 3 position. KEY OUT DELAY COARSE ADJ. switch Adjust the gain value of the KEY OUT. S101(H14): Adjust the delay value of the KEY OUT V518(H11): PGM OUT(COMPONENT) SYNC LEVEL corresponding to the PGM OUT. The delay value can be changed in sixteen Adjust the sync level of the PGM OUT steps with units of about 70ns. (COMPONENT) Y signal. V520(J14): PGM OUT(COMPONENT)Y GAIN control When the unit is shipped, this switch is set to the "5" position. Adjust the gain value of the PGM DSK VIDEO FORMAT SELECT switch OUT(COMPONENT) Y signal. S102(G14): This switch can be changed to match the V521(H11): PGM OUT(COMPONENT)R-Y DELAY conformat of signal which is connected to the DSK VIDEO IN connector. Adjust the delay value of the PGM OUT (COMPONENT) Y signal corresponding to the COMPOSITE: composite video signal Y/R-Y/B-Y: luminance Y signal and color R-Y signal. /522(J14): PGM OUT (COMPONENT)R-Y GAIN control difference signal(R-Y/B-Y) Adjust the gain value of the PGM R/G/B: RGB signal When the unit is shipped, this switch is set to OUT(COMPONENT) R-Y signal. the R/G/B position. 7523(J11): PGM OUT(COMPONENT)B-Y DELAY control S103(F14): DSK EXT KEY DELAY ADJ.switch Adjust the delay value of the PGM Adjust the delay value of the DSK KEY IN OUT(COMPONENT) signal corresponding to the DSK VIDEO IN. corresponding to Y signal. V524(J14): PGM OUT(COMPONENT)B-Y GAIN control The delay value can be changed in sixteen steps with units of about 70ns. Adjust the gain value of the PGM When the unit is shipped, this switch is set to OUT(COMPONENT) B-Y signal. the "6" position. V525(H10): PGM OUT(COMPOSITE,Y/C)BURST LEVEL Adjust the burst level of the PGM OUT

(COMPOSITE, Y/C).

FM-29 BOARD (A side)



Switch

S1(H3):

MEMORY LIGHT TIMING (FINE) switch

Adjust the timing of level direction memory

writing of frame synchro memory.

When the unit is shipped, this switch is set to

the following position.

UC: 2

EK:6

As the switch is set to suitable position when the unit is shipped, do not touch the swtich.

MEMORY LIGHT TIMING (COARSE) switch S2(J3):

Adjust the timing of level direction memory

writing of frame synchro memory.

When the unit is shipped, this switch is set to

the following position.

UC:4

EK:4

S3(A10):

TITLE EXT KEY DELAY (FINE) switch

Adjust the delay value of the EXT KEY in the

TITLE mode.

When the unit is shipped, this switch is set to

the following position.

UC: D

EK: E

S4(A9):

TITLE EXT KEY DELAY (MED) switch

Adjust the delay value of the EXT KEY in the

TITLE mode.

When the unit is shipped, this switch is set to

the following position.

UC:6

EK:5

S5(A9):

TITLE EXT KEY DELAY (COARSE) switch

Adjust the delay value of the EXT KEY in the

TITLE mode.

When the unit is shipped, this switch is set to

the following position.

UC:6

EK: 6

LE-55 BOARD (A side)



Indicator

D1: POWER indicator (Yellow)

Lights when the Power is turned on.

D2: POWER indicator (Yellow)

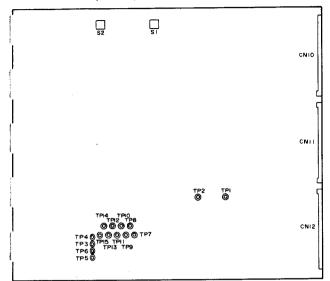
Lights when the Power is turned on.

D3: POWER indicator (Yellow)

Lights when the Power is turned on. D4: POWER indicator (Yellow)

Lights when the Power is turned on.

PU-78 BOARD (A side)



witch

_1(E1):

2(C1):

PAGE TURN LIGHTING POSITION switch Adjust the position of the page lighting. When the unit is shipped, the switch is set to the "3" position.

Do not touch the switch for it is set suitable position when the unit is shipped.

position when the unit is shipped.

PAGE TURN LIGHTING POSITION switch

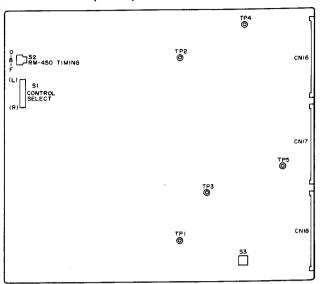
Adjust the position of the page lighting. When the unit is shipped, the switch is set to

the "9" position.

Do not touch the switch for it is set suitable

position when the unit is shipped.

SY-172 BOARD (A side)



Switch

S1(A4): SELECT EDITING CONTORL UNIT switch

Select the editing control unit.(BVE-600, RM-450, ONE-GPI, BVE-900 and BVS-3000)
When the unit is shipped, the switch is set to

the "BVE-900" posion.

S2(A3): FREEZE TIMING switch

Adjust the freeze point, if DFS-500 with RM-

450.

When the unit is shipped, the switch is set to

the "8" position.

S3-1(L10): FREEZE switch (When changing the cross

point)

ON:2 Frames OFF:0 Frame

When the unit is shipped, the switch is set to

the ON position.

S3-2(L10): SET UP switch

ON:7.5% OFF: 0%

When the unit is shipped, the switch is set to

the OFF position.

S3-3(L10): COLOR-MATTE COMPENSATION switch

ON:Illegal compensation OFF:Limit compensation

When the unit is shipped, the switch is set to

the OFF position.

S3-4(L10): FIELD FREEZE switch

ON:Odd Field OFF:Even Field

When the unit is shipped, the switch is set to

the OFF position.

(NOTE1) If the input signal is asynchronous, S3-1 is set

definitely to ON positon.

(NOTE2) If the editing control unit is BVE-600, S3-4 is set

definitely to OFF positon.

1-14. NOTES ON SPARE PARTS

1-14-1. Notes on Spare Parts

(1) Safety Related Cmponents Warning

Components marked with A on the schematic diagrams, exploded views and electrical spare parts list are critical to safe operation.

Replace these components with Sony parts whose part numbers appear in this manual or in service bulletins and service manual supplements published by Sony.

(2) Standardization of Parts

Spare parts supplied from Sony Parts Center may not always be identical with the parts actually in use due to accommodating the improved parts and/or engineering changes or standardization of genuine parts.

This manual's exploded views and electrical spare parts list indicate the part numbers of the standardized genuine parts at present.

(3) Stock of Part

Parts marked with "o" in the SP(Supply code)column of the spare parts list are not normally required for routine service work. Orders for parts marked with "o" will be processed, but allow for additional time for delivery.

(4) Units for Capacitors, Inductors and resistors

The following units may be assumed in schmatic diagrams, electrical parts list and exploded views unless otherwise specified.

> Capacitor: µ F Inductor: µH Resistor : Ω

1-14-2. Replacement of Chip Parts

Required Tools

Soldering iron: 20W

If possible, use a soldering-iron tip

heatcontroller set to 270 ± 10°C.

Braided wire : Solder Taul or equivalent

Sony part No. 7-641-300-81

Solder

: 0.6mm dia. is recommended.

Tweezers

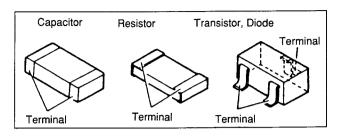
Soldering Conditions

Soldering iron temperature : 270 ± 10°C

Soldering time

: Less than 2 seconds

per pin



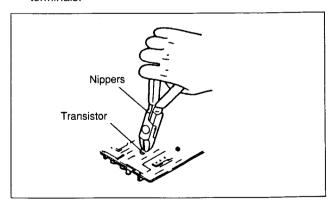
Replacement of Resistor and Capacitor

- 1. Place the soldering-iron tip onto the chip part and heat it up until the solder is melted. When the solder is melted, slide the chip part aside.
- 2. Make sure that there is no pattern peeling, damage and/ or bridge around the desoldering position.
- 3. After removing the chip part, presolder the area, in which the new chip part is to be placed, with a thin layer of
- 4. Place new chip part in the desired position and solder both ends.

NOTE: Do not use a chip part again once it has been removed.

Replacement of Transistors and Diodes

- 1. Cut the terminals of the chip part with nippers.
- Remove the cut leads with soldering iron as above.
- Make sure that there is no pattern peeling, damage and/ or bridge around the desoldering positions.
- After removing the chip part, presolder the area, in which the new chip part is to be placed, with a thin layer of
- Place new chip part in the desired position and solder the terminals.





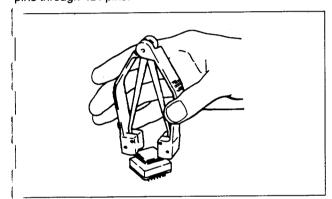
neplacement of ICs

- Using the braided wire, "SOLDER TAUL" (Sony Part No. 7-641-300-81), remove the solder around the pins of the IC-chip to be removed.
- While heating up the pins, remove the pins one by one using sharp-pointed tweezers.
 - Make sure that there is no pattern peeling, damage and/ or bridge around the desoldering position.
- After removing the chip part, presolder the area, in which the new chip part is to be placed, with a thin layer of solder.
- .. Place new chip part in the desired position and solder the pins.

-14-3. Removal of PLCC IC

PLCC socket Extracion Tool ony Part No. J-6035-070-A

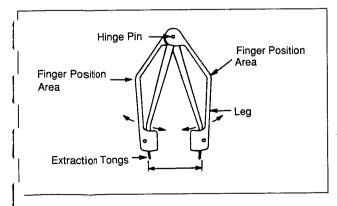
nis extraction tool is useful for extracting the IC (PLCC type) inserted into an IC socket, and fits all sizes of ICs from 20 pins through 124 pins.



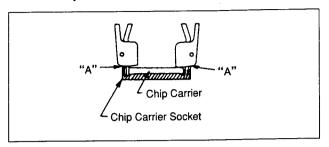
NOTE: Do not try to pull chip carrier out of sccket and let the tool action pull it out. Do not squeeze harder than necessary, only enough that the tool action occurs.

THou to use the Extracion Tool]

Spread or compress the tool legs so the tongs will fit into the solts of the chip carrier socket.



2. Insert the tool tongs into the slots of the carrier socket. Puch fully in so that the tool butts on the socket at "A".

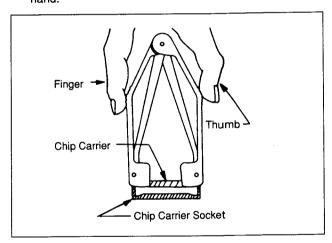


Place the thumb and the first and second finger on the ribbed area of the tool. Maintain a small downward force to keep the tool butted on the socket.

Squeeze the thumb and finger together so that the tool legs tend to straighten.

This action will draw the chip carrier out of the socket and grip it within the tool legs.

Maintain the squeezing action so as to hold the chip in the tool, hold the tool over your other hand and relax the squeeze. The chip will fall out of the tool and into your hand.



1-14-4. Replacement of Backup Battery

DFS-500 has a backup battery (Nickel-Cadmium Battery) on the SY-172 board.

This backup battery can register the settings on the control panel (snap shot) and store the effets created by user (user program).

Backup Battery: Nickel-Cadmium Battery

Sony Parts No. 1-528-202-11

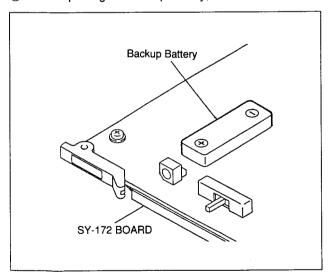
NOTE: This backup battery is charged automatically on normal operation for about eight hour. If it is not used for long time (about more than one month), the backup battery consumes. As a resalt, the following setting (1) through (4) and data is disappeared, and they are initialized. At that time, charge the backup battery.

- (1) Resume function (The setting recovery when turning the power OFF.)
- (2) Data of user program
- (3) Data of snap shot
- (4) Direct pattern assign function

If the unit serves for about five year, the backup battery should be replaced. At this time, the following setting (1) through (4) and data is disappeard, and they are initialized. After replacement, charge the backup battery.

Replacement Procedure

- ① Remove eight screws (+PTTWH 3×6), and remove the shield plate.
- ② Unsolder two soldering parts, and replace the backup battery.
- 3 After replacing the backup battery, and solder it.



1-14-5. Replacement of Fuse

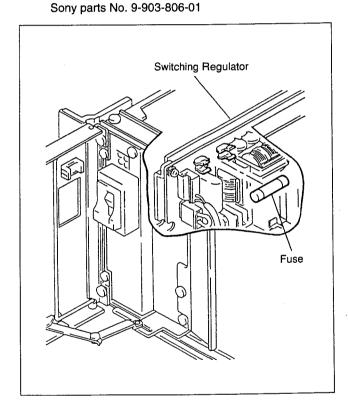
The fuse is mounted on the switching regurator. This fuse melted when the too much electric current flows by unusual instrument.

Before replacing the fuse, check the trouble of fuse.

Replacement Procedure

Before replacement of Fuse, take out the cause of short for unit.

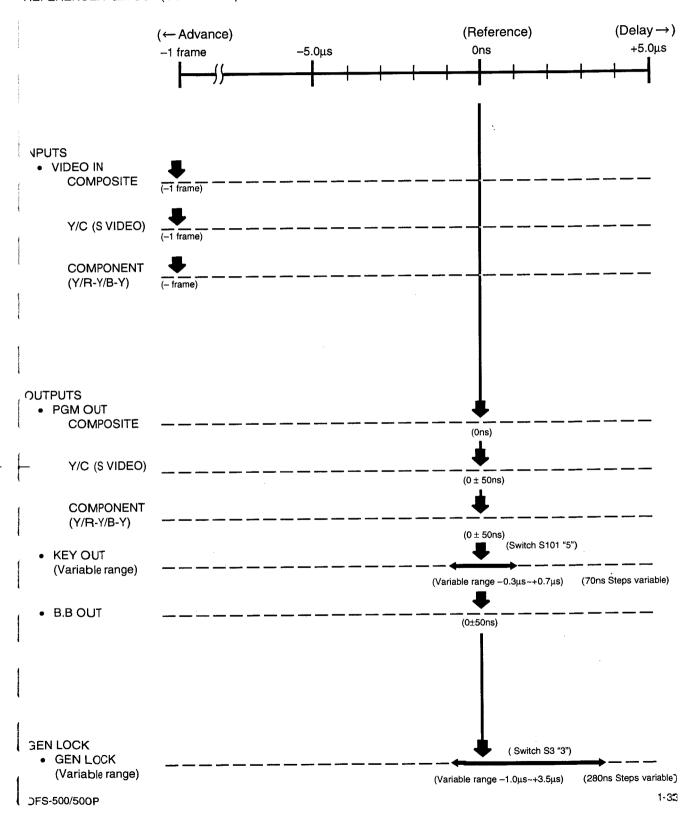
- ① Remove the top panel. (Refer to "Section 1-1 REMOVAL OF CABINET" Top Panel.)
- ② Remove the fuse on the switching regurator from the holder.
- ③ Replace a new fuse. Fuse: (for UC) GGL10 250V10A Sony parts No. 9-903-804-01 Fuse: (for EK) \$506-6.3A COLOR



1-15. TIMING CHART

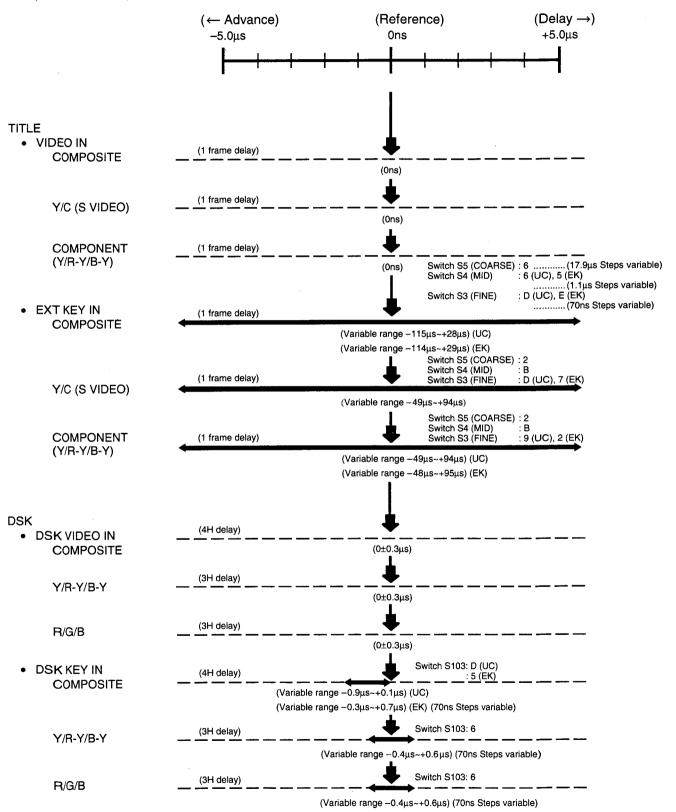
-15-1. System Timing

REFERENCE: PGM OUT (COMPOSITE)



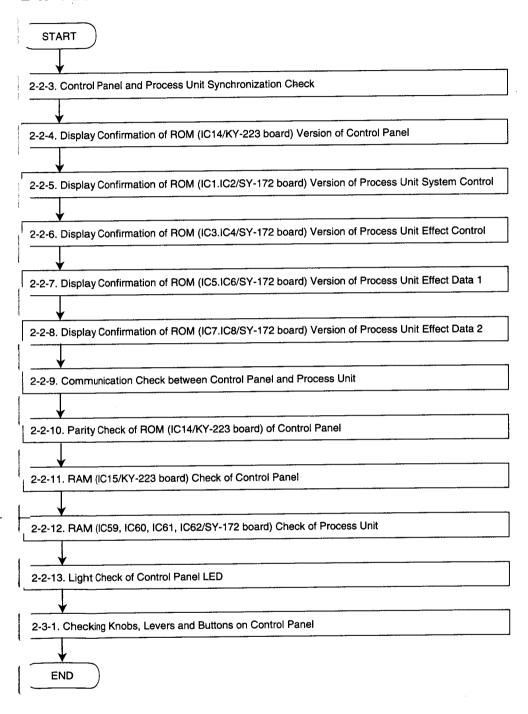
1-15-2. Timing of TITLE and DSK (Video Phase)

Test point: PGM OUT (COMPOSITE)



SECTION 2 DIAGNOSTIC

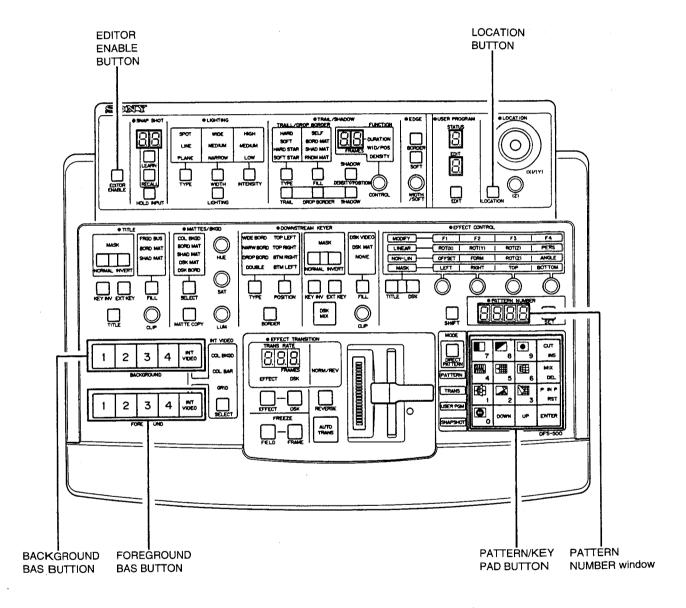
∠-1. FLOW CHART



2-2. CHECK MODE

If any error occurs at power on or during normal operation, the error number is displayed in the PATTERN NUMBER window.

Buttons and displays that are referred in the following check procedures are labelled as shown below.



∠-2-1. Countermeasures for Error Messages

PATTERN NUMBER window	Operation	Cause of error	Countermeasure
Er01	During normal operation	The vertical sync signal is not being sent from main unit to the control panel. (The control panel works while synchronizing to the vertical sync signal that is supplied from main unit.)	Possible fault in the SY-172 board, the DA-63 board or the cable.
Er02	At power on During normal operation	Fault in communications between the main unit and the control panel.	Possible fault in the SY-172 board or the cable.
Er10	At power on During normal operation	Abnormal parity in the control panel ROM (IC14/KY-223 board) of the KY-223 board.	Replace the control panel ROM (IC14) of the KY-223 board.
Er20	At power on During normal operation	Abnormality in the control panel RAM (IC15/KY-223 board) of the KY-223 board.	Replace the control panel RAM (IC15) of the KY-223 board.
Er40	At power on	Abnormality in the RAMs (IC59,60,61,62) of the main unit (SY-172 board).	Replace the RAMs (IC59,60,61,62) of the main unit (SY-172 board).

OTE: If two or more errors occur at the same time, the sum of the various error numbers is displayed.

-2-2. Backup Memory Warnings

Backup memory data is checked at power on. If abnormality is found, the memory is initialized automatically. At the same time, the warning and the pattern number are displayed alternatively in the ATTERN NUMBER window. Press the ENTER button of the Key Pad block to clear the warning and sturn to the normal operation condition.

PATTERN NUMBER window	Meaning	
bu01	The memory of the user program effect is faulty. It is initialized automatically.	
bu02	The snap shot memory is faulty. It is initialized automatically.	
bu04	The memory of the direct pattern assignment is faulty. It is initialized automatically.	
bu10	The memory to recover (resume function) the default in power OFF is faulty. It is initialized automatically.	

NOTE: If two or more abnormality occur at the same time, the sum of the various warning numbers is displayed.

2-2-3. Control Panel and Process Unit Synchronization Check

The control panel works while synchronizing to the vertical sync signal that is supplied from the main unit. The process unit checks all the time during operation that the sync signal is being sent correctly to the control panel.

Execution method during operation	Confirmation item	
It is checked all the time during operation.	PATTERN NUMBER window	
	PATTERN NUMBER SET If there is any abnormality, error is displayed.	
Cause • Vertical sync signal is not sent from the m (The control panel works while synchroniz	ain unit to the control panel correctly. ting to the vertical sync signal that is supplied from main unit.)	
Operator action • Possible fault in the SY-172 board, the DA	A-63 board or the cable.	

2-2-4. Display Confirmation of ROM (IC14/KY-223 board) Version of Control Panel

ROM (IC14) version of the KY-223 board is displayed. It is confirmed whenever power is turned on.

Execution method during operation	Confirmation item
While pressing the BACKGROUND 1 and the FOREGROUND 1, press the LOCATION.	KEY PAD buttons light in the shape of letter C. (buttons 1-4 and 7-9) PATTERN/KEY PAD R R R R R R R R R PATTERN NUMBER window. At this time, all other LEDs light off. PATTERN NUMBER PATTERN NUMBER R R R PATTERN R

2-2-5. Display Confirmation of ROM (IC1. IC2/SY-172 board) Version of Process Unit System Control

ROM (IC1. IC2) version of the SY-172 board is displayed.

Execution method during operation	Confirmation item	
While pressing the BACKGROUND 1 and the FOREGROUND 2, press the LOCATION.	KEY PAD buttons light in the shape of letter C. (buttons 1-4 and 7-9) PATTERN/KEY PAD Check that the version number X.XX is displayed on the PATTERN NUMBER window. At this time, all other LEDs light off. Press the ENTER on the KEY PAD button to restore normal operation.	

-2-6. Display Confirmation of ROM (IC3.IC4/SY-172 board) Version of Process Unit Effect Control

ROM (IC3.IC4) version of the SY-172 board is displayed.

Execution method during operation	Confirmation item		
While pressing the BACKGROUND 1 and the FOREGROUND 3, press the LOCATION.	KEY PAD buttons light in the shape of letter C. (buttons 1-4 and 7-9) PATTERN/KEY PAD PATTERN/KEY PAD PATTERN/KEY PAD SET Check that the version number X.XX is displayed on the PATTERN NUMBER window. At this time, all other LEDs light off. PATTERN NUMBER SET Press the ENTER on the KEY PAD button to restore normal operation.		

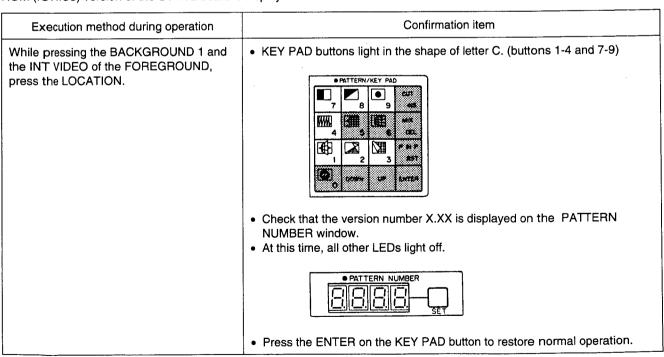
2-2-7. Display Confirmation of ROM (IC5.IC6/SY-172 board) Version of Process Unit Effect Data 1

ROM (IC5.IC6) version of the SY-172 board is displayed.

Execution method during operation	Confirmation item
While pressing the BACKGROUND 1 and the FOREGROUND 4, press the LOCATION.	• KEY PAD buttons light in the shape of letter C. (buttons 1-4 and 7-9) PATTERN/KEY PAD P
	 Check that the version number X.XX is displayed on the PATTERN NUMBER window. At this time, all other LEDs light off.
	PATTERN NUMBER SET
	Press the ENTER on the KEY PAD button to restore normal operation.

2-2-8. Display Confirmation of ROM (IC7.IC8/SY-172 board) Version of Process Unit Effect Data 2

ROM (IC7.IC8) version of the SY-172 board is displayed.



∠-2-9. Communication Check between Control Panel and Process Unit

Communication between the control panel and process unit is checked.

- this check, the communication check command is sent from the control panel to the process unit.
- nen, it is checked if a response command is returned within the specified time.

It is checked whenever power is turned on.

Execution method during operation	Confirmation item		
While pressing the BACKGROUND 2 and he FOREGROUND 3, press the LOCATION.	KEY PAD buttons light in the shape of letter C. (buttons 1-4 and 7-9) PATTERN/KEY PAD PATTERN/KEY PAD PATTERN NUMBER PATTERN NUMBER		
	Press the ENTER on the KEY PAD button to restore normal operation		

Operator action

• Possible fault in the DA-63 board, the cable, etc.

2-2-10. Parity Check of ROM (IC14/KY-223 board) of Control Panel

Parity of KY-223 board ROM (IC14) is checked. It is checked whenever power is turned on.

Confirmation item Execution method during operation • KEY PAD buttons light in the shape of letter C. (buttons 1-4 and 7-9) While pressing the BACKGROUND 3 and the FOREGROUND 1, press the LOCATION. Check that the version number STATUS is displayed on the PATTERN NUMBER window. • At this time, all other LEDs light off. →Normal → Abnormal Press the ENTER on KEY PAD button to restore normal operation. Cause Parity of KY-223 board ROM (IC14) is abnormal. Operator action • Replace the KY-223 board ROM (IC14).

2-2-11. RAM (IC15/KY-223 board) Check of Control Panel

PAM (IC15) on the KY-223 board is checked. is checked whenever power is turned on.

Execution method during operation	Confirmation item
While pressing the BACKGROUND 3 and the FOREGROUND 2, press the LOCATION.	• KEY PAD buttons light in the shape of letter C. (buttons 1-4 and 7-9) PATTERN/KEY PAD P
	 Check that the version number STATUS is displayed on the PATTERN NUMBER window. At this time, all other LEDs light off.
	PATTERN NUMBER → Normal
	● PATTERN NUMBER → Abnormal
	Press the ENTER on KEY PAD button to restore normal operation.
Cause Parity of KY-223 board RAM (IC15) is abn	ormal.
Operator action Replace the KY-223 board RAM (IC15).	

2-2-12. RAM (IC59, IC60, IC61, IC62/SY-172 board) Check of Process Unit

AMs (IC59,IC60,IC61,IC62/SY-172 board) on the process unit is checked. is checked whenever power is turned on.

Execution method during operation	Confirmation item	
	PATTERN NUMBER window	
	PATTERN NUMBER SET	
	If there is any abnormality, error is displayed as shown above.	

Cause

• RAMs (IC59,IC60,IC61,IC52/SY-172 board) on the process unit is abnormal.

Operator action

• Replace the RAMs (IC59, IC60, IC61, IC62) on the process unit SY-172 board.



2-2-13. Light Check of Control Panel LED

Light all the LEDs on the control panel one by one sequentially.

Execution method during operation

While pressing the BACKGROUND 2 and the FOREGROUND 1, press the LOCATION.

NOTE: (1) The LEDs lighting speed can be changed by F4 control on the EFFECT CONTROL block. Normal speed is 100%. The

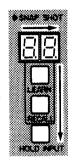
speed ranges from 50% to 200%.

(2) When a button of a block is pressed, lighting jumps to the top of respective block.

Confirmation item

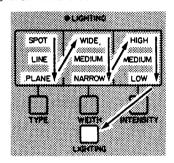
LEDs light in order from top to bottom, left to right.

- 1 EDITOR ENABLE button (EDITOR ENABLE button lights.)
- 2 SNAP SHOT block

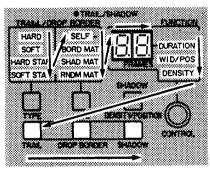


Counter block test
 Left hand digit counts up from 0-9, then right hand
 digit counts up from 0-9.

3 LIGHTING block

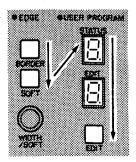


4 TRIAL/SHADOW block



 Counter block test Left hand digit counts up from 0-9, then right hand digit counts up from 0-9.

5 EDGE block, USER PROGRAM block



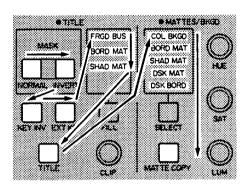
 Counter block test STATUS digit counts up from 0-9, then EDIT digit counts up from 0-9.



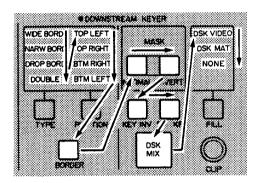
Execution method during operation

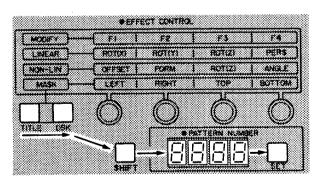
Confirmation item

- **6** LOCATION block (LOCATION button lights.)
- 7 TITLE block, MATTES/BKGD block



8 DOWNSTREAM KEYER block



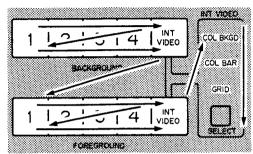


 Counter block test
 Left most digit of the four counters counts up from 0-9, then the next right hand digit counts up from 0-9 in this order.

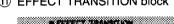
Execution method during operation

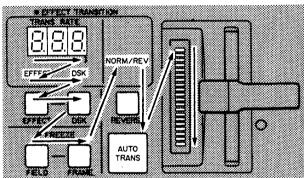
Confirmation item

10 Primary Crosspoint Bus block

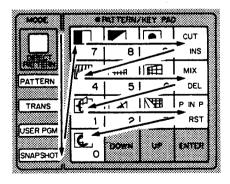


- BACKGROUND button test LEDs light from left to right first in red then in orange.
- FOREGROUND button test LEDs light from left to right first in red then in orange.
- 11 EFFECT TRANSITION block





- Counter block test Left most digit of the three counters counts up from 0-9, then the next right hand digit counts up from 0-9 in this order.
- 12 PATTERN/KEY PAD block



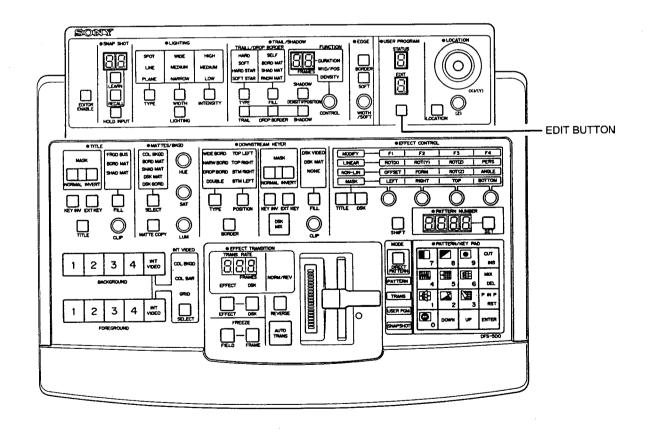
Confirm that the LEDs light in the order as shown above. (buttons 0-9, CUT INS, MIX DEL, P IN P RST and ENTER)

Press the ENTER on the KEY PAD button to restore normal operation.

2-3. CHECKING KNOBS, LEVERS AND BUTTONS ON CONTROL PANEL

nobs and corresponding buttons

Knob			Corresponding button
EFFECT CONTROL block	F1	KEY PAD block	Button 7
	F2	KEY PAD block	Button 8
	F3	KEY PAD block	Button 9
	F4	KEY PAD block	CUT INS
LOCATION block	Z	LOCATION block	LOCATION
		FOREGROUND	INT VIDEO
EDGE block	WIDTH/	EDGE block	Either EDGE block button
	SOFT	FOREGROUND	Button 2
TITLE block	CLIP	TITLE block	Either TITLE block button
THEE BIOOK		BACKGROUND	Button 4
MATTES/BKGD block	HUE	BACKGROUND	Button 1
	SAT	BACKGROUND	Button 2
	LUM	BACKGROUND	Button 3
DOWNSTREAM KEYER	CLIP	DOWNSTREAM KEYER	Either DOWNSTREAM KEYER block button
TRAIL/SHADOW	CONTROL	TRAIL/SHADOW	Any TRAIL/SHADOWN block button
		FOREGROUND	Button 1



2-3-1. Checking Knobs, Levers and Buttons on Control Panel

Execution method during operation Confirmation item

STEP-1

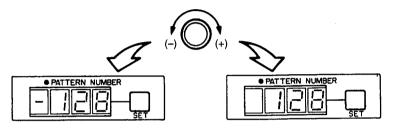
While pressing the BACKGROUND 2 and the FOREGROUND 2, press the LOCATION. (NOTE: At this time, warning tone sounds).

Step 2, 3, 4 and 5 can be checked undividually.

STEP-2 Knob Check

Referring to the table showing knobs and corresponding buttons, turn the knob while pressing the corresponding button.

 Turn the knob and read the values shown in the PATTERN NUMBER window.



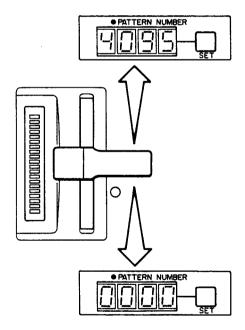
- The values range between -128 (when the knob is fully counterclockwise) and +128 (when the knob is fully clockwise). The values are only displayed while the corresponding button is being pressed.
- Press the ENTER on KEY PAD button to restore normal operation.

STEP-3 FADER lever Check

Move the FADER lever from an end to the other end.

While pressing any button of EFFECT TRANSITION block, move the FADER lever.

 Move the FADER lever and read the values shown in the PATTERN NUMBER window.



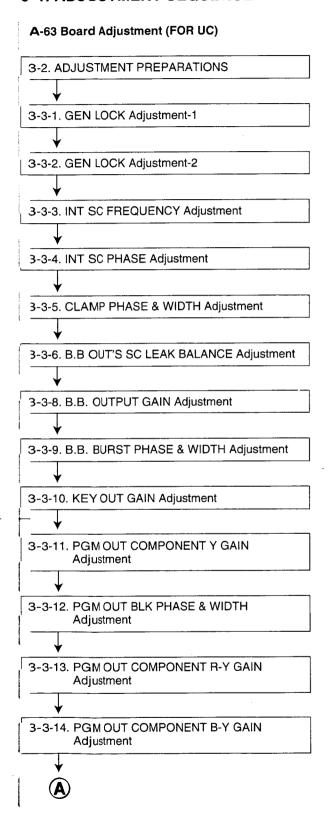
- Values range from 0 (the bottom most end) to 4095 (the top most end)
- Press the ENTER on KEY PAD button to restore normal operation.

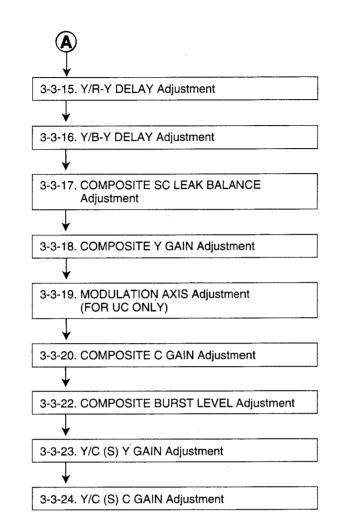


Confirmation item Execution method during operation Move the LOCATION (X)/&(Y) lever and read the values shown in the STEP-4 LOCATION (X)/(Y) lever Check PATTERN NUMBER window. X (left/right) direction: Move the LOCATION (X)/&(Y) lever. Y (up/down) direction: While pressing EDIT of USER PROGRAM or FOREGROUND 4, move the LOCATION (X)/&(Y) lever. • Moving the lever up or to the right increases the absolute value, moving it down or to the left decreases this value. The range on each axis is 0 to • X (left/right) direction is checked without pressing button. • Y (up/down) direction is checked while the assigned button is pressed. Press the ENTER on KEY PAD button to restore normal operation. • Check that the following MODE indicators on the PATTERN/KEY PAD STEP-5 Button Check block light all at the same time. Press all the buttons one by one. At this time, the buttons of self-illuminating type light their LEDs and the other buttons light their nearest LEDs. PATTERN TRANS USER PGM • In this check, if two or more buttons are pressed at the same time, a warning sounds. If the warning sounds when only one button is pressed, suspect a fault like a short-circuit. • Press the ENTER on KEY PAD button to restore normal operation. (NOTE: Check the ENTER on KEY PAD button last.)

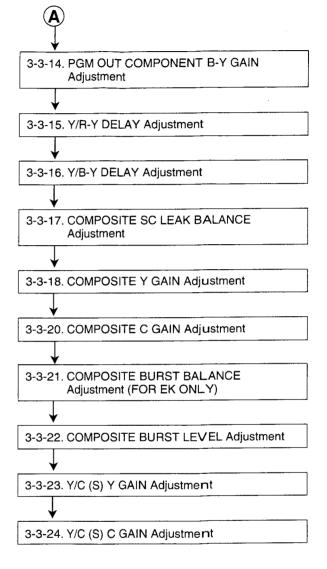
SECTION 3 ELECTRICAL ALIGNMENT

J-1. ADJUSTMENT SEQUENCE

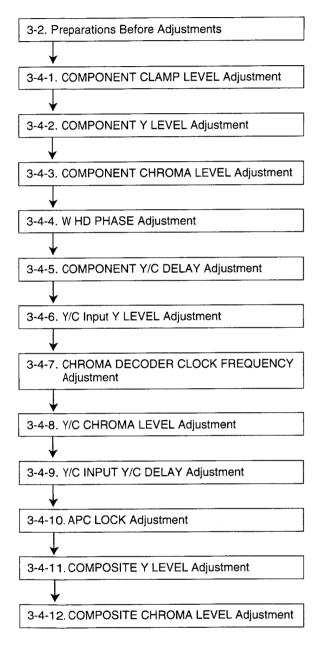




DA-63 Board Adjustment (FOR EK) 3-2. ADJUSTMENT PREPARATIONS 3-3-1. GEN LOCK Adjustment-1 3-3-2. GEN LOCK Adjustment-2 3-3-3. INT SC FREQUENCY Adjustment 3-3-4. INT SC PHASE Adjustment 3-3-5. CLAMP PHASE & WIDTH Adjustment 3-3-6. B.B OUT'S SC LEAK BALANCE Adjustment 3-3-7. MODURATION AXIS & B.B BURST BALANCE Adjustment (FOR EK ONLY) 3-3-8. B.B. OUTPUT GAIN Adjustment 3-3-9. B.B. BURST PHASE & WIDTH Adjustment 3-3-10. KEY OUT GAIN Adjustment 3-3-11. PGM OUT COMPONENT Y GAIN Adjustment 3-3-12. PGM OUT BLK PHASE & WIDTH Adjustment 3-3-13. PGM OUT COMPONENT R-Y GAIN Adjustment



AD-76 Board Adjustment



3-2. ADJUSTMENT PREPARATIONS

3-2-1. Tools/Measuring Equipments

- Composite Signal Generator
 Equivalent: 1410(NTSC)/Tektronix
 1411(PAL)/Tektronix
- 2. Component Signal Generator Equivalent: TSG300/Tektronix
- Y/C Signal Generator
 Equivalent: TSG130(NTSC)/Tektronix
 TSG131(PAL)/Tektronix
- 4. Oscilloscope
 Equivalent: 2445/Tektronix
- Waveform Monitor and Vectorscope
 Equivalent: 1780(NTSC)/Tektronix
 1781(PAL)/Tektronix
- Video MonitorEquivalent: PVM1444Q/Sony
- 7. Frequency Counter
 Equivalent: 5315/Hewlett Packard
- 8. Digital Voltmeter
 Equivalent: 3435A/Hewlett Packard
- 9. Video Cable (S-BNC) Sony Parts No.: J-6381-380-A
- 10. Multi-connector Cable (DIBNC) Sony Part No.: J-6031-820-A
- 11. Multi-connector Cable (DOBNC)
 Sony Part No.: J-6031-830-A
- 12. Extension Board (EX-326)
 Sony Part No.: J-6186-940-A

Switch Settings

- DA-63 board S1: OFF
- S2: 0° S3: 3 S101: 5 S102: R/G/B

S103: 6

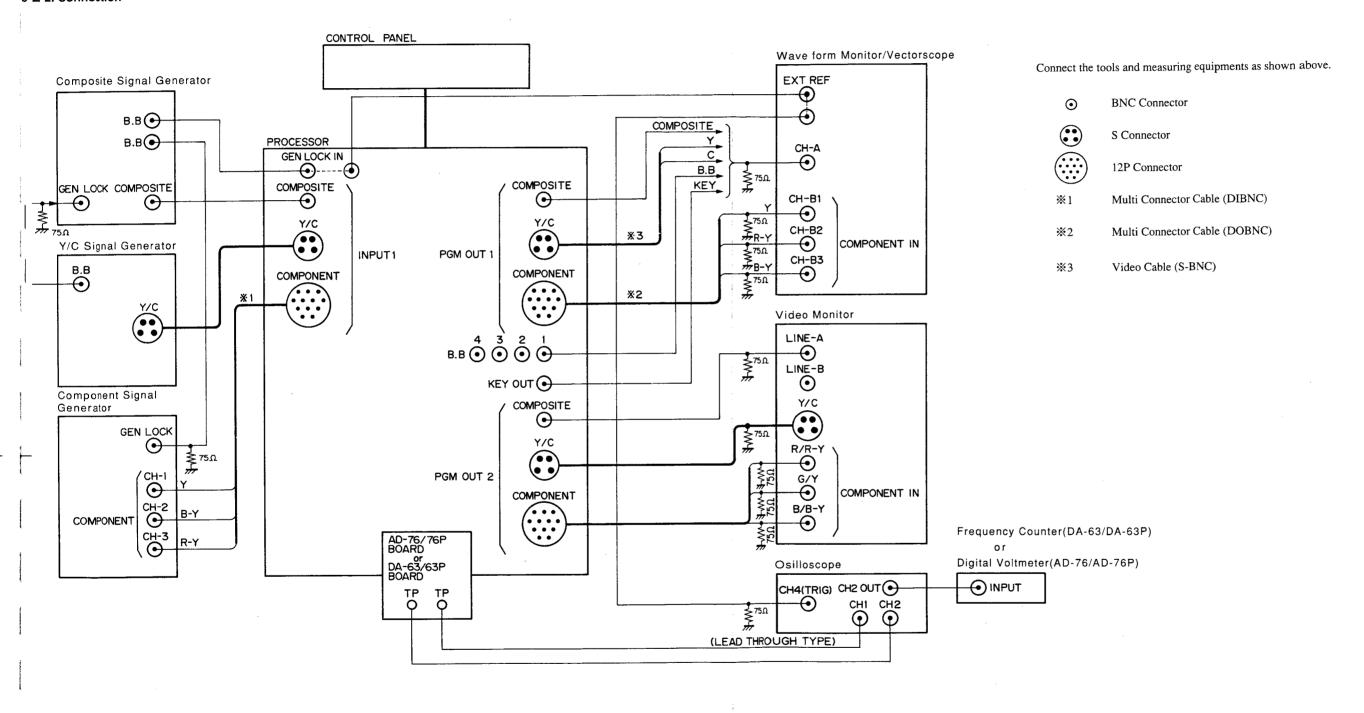
Volume Settings

- DA-63 board
- RV11 : Mechanical center RV515: Mechanical center
- RV526: Middle of left fully and Mechanical center

3-2

3-2-2. Connection

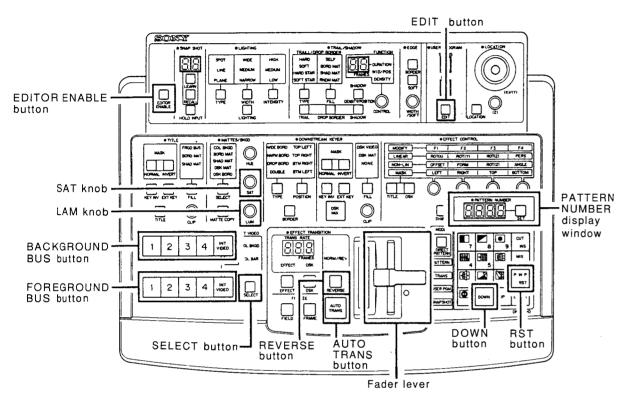
DFS-500/500P



3-2-3. Built-in Color Bars

Selecting the built-in color bars

• The buttons, knobs and displays used in this manual are shown in the figure below.



Selecting the built-in color bars

STEP-1

Initialize the control panel setting

- 1. If the EDIT button of the USER PROGRAM section is lit, press it to turn it off.
- While pressing the RST and DOWN buttons of the KEY PAD section, press the EDITOR ENABLE button.

The buzzer will sound, and each setting will be initialized-returning them to factory settings.

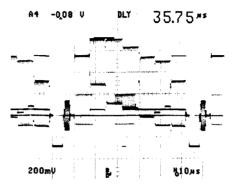
STEP-2

Output the built-in color bars to PGM OUT

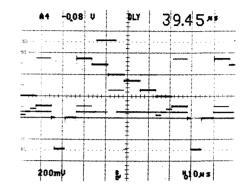
- Select the COL BAR
- 1. Select the INT VIDEO button with both the BACKGROUND bus and FOREGROUND bus.
- 2. Push the FADER LEVER to the top or bottom. The INT VIDEO button of BACKGROUND bus will light up red and that of the FOREGROUND bus will light up orange.
- 3. Press the INT VIDEO SELECT button and select COL BAR.
- Select COL BKGD (100% WHITE)
- 1. Select the INT VIDEO button with both the BACKGROUND bus and FOREGROUND bus.
- 2. Push the FADER LEVER to the top or bottom. The INT VIDEO button of BACKGROUND bus will light up red and that of the FOREGROUND bus will light up orange.
- 3. Press the INT VIDEO SELECT button and select COL BKGD.
- Rotate the SAT knob of the MATTES/BKGD section to the left until the buzzer sounds.
 Do the same for the LUM knob.

Built-in Color Bars (FOR UC)

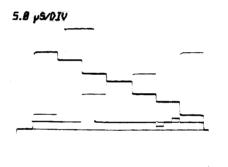
COMPOSITE



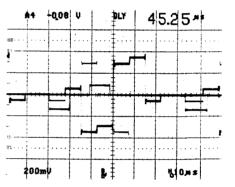
COMPONENT Y



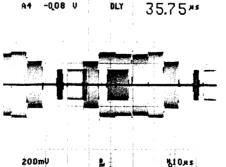
Y/C Y



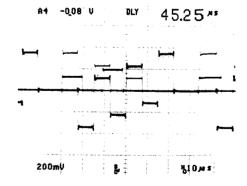
COMPONENT R-Y



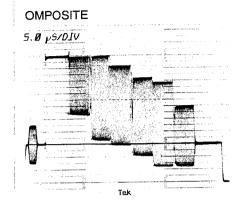
Y/C C

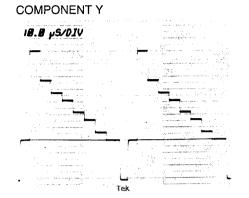


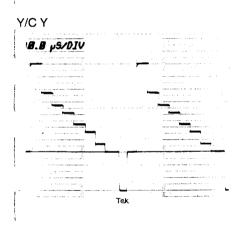
COMPONENT B-Y

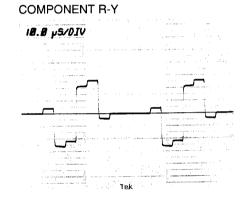


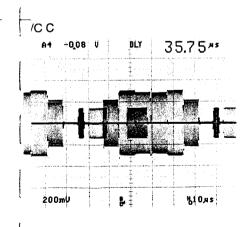
built-in Color Bars (FOR EK)

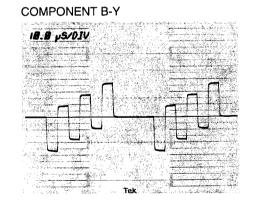






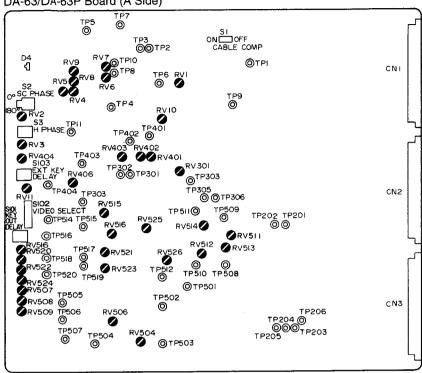




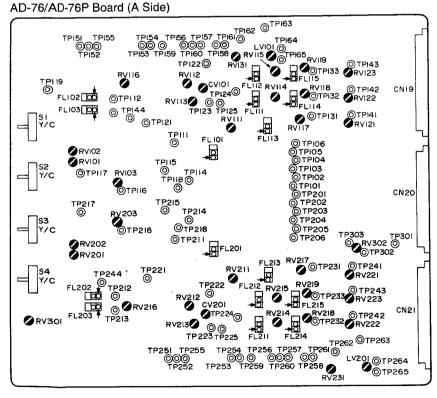


3-2-4. Layout of Adjustment Controls

DA-63/DA-63P Board (A Side)







ప-3. DA-63 BOARD ADJUSTMENT 3-3-1. GEN LOCK Adjustment-1

Machine conditions for adjustment	Specifications	Adjusting Point
 STEP-1 Connection: Section 3-2-2 Connect Extension board: Extend the DA-63 Switch setting: S3-2/SY-172 (L10) = S3-2/SY-172 (L10) = 	board with the EX-326 board. = ON (For UC)	
STEP-2	• Check that D4 lights up. CH-1: B.B OUT-1 CH-2: GEN LOCK IN NG CH-1	H PHASE FINE adjustmer PRV3/DA-63 (E14) H PHASE COARSE S3/DA-63 (D14)
- Oppilloggano	OK 57.16*	
Oscilloscope CH-1: 200 mV/DIV	A = 0 ± 50 nS	

2 μS/DIV CH-2: 200 mV/DIV

2μS/DIV TRIG: B.B (CH-4)

• Adjust ORV3 and S3 so that the specification above is satisfied.

3-3-2. GEN LOCK Adjustment-2

Machine conditions for adjustment	Specifications	Adjusting Point
STEP-1 Connection: Section 3-2-2 Connection: Extension board: Extend the DA-63 Switch setting: S3-2/SY-172 (L10)	3 board with the EX-326 board.	
STEP-2	PGM OUT 1 (COMPOSITE) NG **** **** **** **** **** **** ****	SC PHASE FINE adjustment PRV2/DA-63 (D14) SC PHASE COARSE S2/DA-63 (C14)
• Vectorscope 75%, SET UP L.DISP: SCH INPUT: CH-A FILTER: FLAT GAIN: VAR REF: EXT	OK NTSC Adjust ◆RV2 and S2 so that the specification above is satisfied.	

(3-3-2. GEN LOCK Adjustment-2)

Machine conditions for adjustment	Specifications	Adjusting Point
STEP-1 Connection: Section 3-2-2 Connect Extension board: Extend the DA-63 Switch setting: S3-2/SY-172 (L10) =	board with the EX-326 board.	
STEP-2	PGM OUT 1 (COMPOSITE) NG PRESCT9 TEX	SC PHASE FINE adjustment PRV2/DA-63 (D14) SC PHASE COARSE S2/DA-63 (C14)
Vectorscope 75% L.DISP: SCH INPUT: CH-A FILTER: FLAT GAIN: VAR REF: EXT	OK PRESETS A = 0 ± 0.5° • Adjust ♥RV2 and S2 so that the specification above is satisfied.	

3-3-3. INT SC FREQUENCY Adjustment

Machine conditions for adjustment	Specifications	Adjusting Point
 STEP-1 Connection: Section 3-2-2 Connect Extension board: Extend the DA-63 Switch setting: S3-2/SY-172 (L10) = Disconnect the GEN LOCK IN connection 	board with the EX-326 board. = ON	
STEP-2	CH-2: TP9/DA-63 (C7)	(Check)
 Oscilloscope CH-2: 200 mV/DIV(AC) 100 nS/DIV TRIG: CH2 	$A = 1.0 \pm 0.2 \text{ V p-p}$ • Check that the specification above is satisfied.	
 STEP-3 Adjust the oscilloscope as follows. CH2: 200 mV/DIV (AC). Connect Frequency counter to CH-2 OUT of oscilloscope. 	3.579545 MHz ± 5 Hz • Check that D4 (B14) is off.	SC FREQUENCY adjustment PRV1/DA-63 (B8)

(3-3-3. INT SC FREQUENCY Adjustment)

Machine conditions for adjustment	Specifications	Adjusting Point
STEP-1 Connection: Section 3-2-2 Connect Extension board: Extend the DA-63 Switch setting: S3-2/SY-172 (L10) = Disconnect the GEN LOCK IN connect	board with the EX-326 board. = OFF	
STEP-2	CH-2: TP9/DA-63 (C7)	(Check)
	200m; B. 100ns	
Oscilloscope CH-2: 200 mV/DIV(AC) 100 nS/DIV TRIG: CH2	$A = 1.0 \pm 0.2 \text{ V p-p}$ • Check that the specification above is satisfied.	
STEP-3 • Adjust the oscilloscope as follows. CH2: 200 mV/DIV (AC). • Connect Frequency counter to CH-2 OUT of oscilloscope.	4.433619 MHz ± 5 Hz • Check that D4 (B14) is off.	SC FREQUENCY adjustment RV1/DA-63 (B8)
STEP-4 • After this adjusting is completed, co	nnect the GEN LOCK IN connector of the rear panel aga	in.

3-3-4. INT SC PHASE Adjustment

FOR UC

Machine conditions for adjustment	Specifications	Adjusting Point
 STEP-1 Connection: Section 3-2-2 Connection Extension board: Extend the DA-63 Switch setting: S3-2/SY-172 (L10) Disconnect the GEN LOCK IN control 	B board with the EX-326 board. = ON	
STEP-2	PGM OUT 1 (COMPOSITE) NG NTSC 100 A A A A A A A A A A A A A A A A A A	INT SC PHASE adjustmen RV10/DA-63 (D9)
• Vectorscope 75%, SET UP L.DISP: SCH INPUT: CH-A FILTER: FLAT GAIN: VAR REF: INT	OK NTSC H Ma Ma Ma Ma Ma Ma Ma Ma Ma	

• After this adjustment is completed, connect the GEN LOCK IN connector of the rear panel again.

رئ-3-4. INT SC PHASE Adjustment)

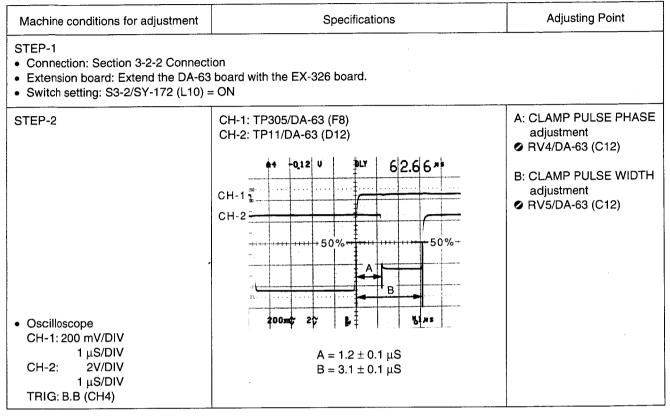
Machine conditions for adjustment	Specifications	Adjusting Point
STEP-1 Connection: Section 3-2-2 Connection: Section 3-2-2 Connection: Extension board: Extend the DA-6 Switch setting: S3-2/SY-172 (L10) Disconnect the GEN LOCK IN con	3 board with the EX-326 board. = OFF	
STEP-2	PGM OUT 1 (COMPOSITE) NG PRESETS 135 A TEX	INT SC PHASE adjustment PRV10/DA-63 (D9)
• Vectorscope 75% L.DISP: SCH INPUT: CH-A FILTER: FLAT	OK PRESETS $A = 0 \pm 0.5^{\circ}$	

GAIN : VAR REF : INT

• Adjust ORV10 so that the specification above is satisfied.

• After this adjustment is completed, connect the GEN LOCK IN connector of the rear panel again.

3-3-5. CLAMP PHASE & WIDTH Adjustment



FOR EK

(उ-3-5. CLAMP PHASE & WIDTH Adjustment)

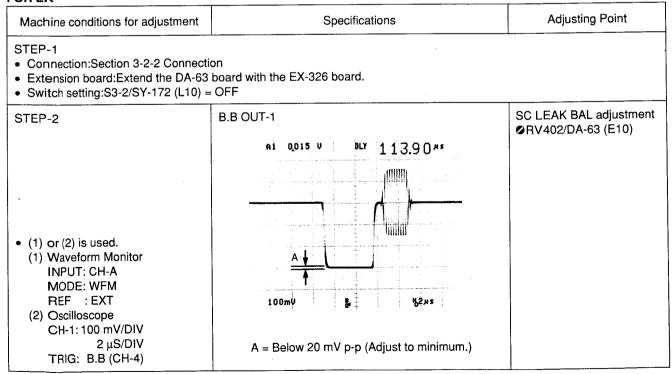
Machine conditions for adjustmen	t Specifications	Adjusting Point
STEP-1 Connection: Section 3-2-2 Conn Extension board: Extend the DA Switch setting: S3-2/SY-172 (L1	-63 board with the EX-326 board.	
• Oscilloscope CH-1:200 mV/DIV 1 µS/DIV CH-2:200 mV/DIV 1 µS/DIV TRIG: B.B (CH-4)	CH-1: TP305/DA-63 (F8) CH-2: TP11/DA-63 (D12) A4 -0.24 V DLY 58.5 4 Ms CH-1 CH-2 A = 1.2 ± 0.1 µS B = 3.1 ± 0.1 µS	A: CLAMP PULSE PHASE adjustment PRV4/DA-63 (C12) B: CLAMP PULSE WIDTH adjustment PRV5/DA-63 (C12)



3-3-6. B.B OUT'S SC LEAK BALANCE Adjustment

FOR UC

Machine conditions for adjustment	Specifications	Adjusting Point
STEP-1 Connection: Section 3-2-2 Connection: Extension board: Extend the DA-6: Switch setting: S3-2/SY-172 (L10)	3 board with the EX-326 board.	
• (1) or (2) is used. (1) Waveform Monitor INPUT: CH-A MODE: WFM REF: EXT (2) Oscilloscope CH-1: 100 mV/DIV	B.B OUT-1	SC LEAK BAL adjustment PRV402/DA-63 (E10)
2 μS/DIV TRIG: B.B (CH-4)	A = Below 20 mV p-p (Adjust to minimum.)	



3-3-7. MODURATION AXIS & B.B BURST BALANCE Adjustment (FOR EK ONLY)

Machine conditions for adjustment	Specifications	Adjusting Point
STEP-1 Connection: Section 3-2-2 Connection: Extension board: Extend the DA-63 Switch setting: S3-2/SY-172 (L10)	B board with the EX-326 board.	
STEP-2	B.B OUT-1 • Set on the circumstance NG PRESETS	MODURATION AXIS adjustment PRV301/DA-63 (E8)
• Vectorscope 75% L.DISP: VECT INPUT: CH-A FILTER: FLAT GAIN: VAR REF: EXT	• Adjust GAIN VR of the vector scope and ⊘ RV301so that the both spots of the BURST are on the circumference.	

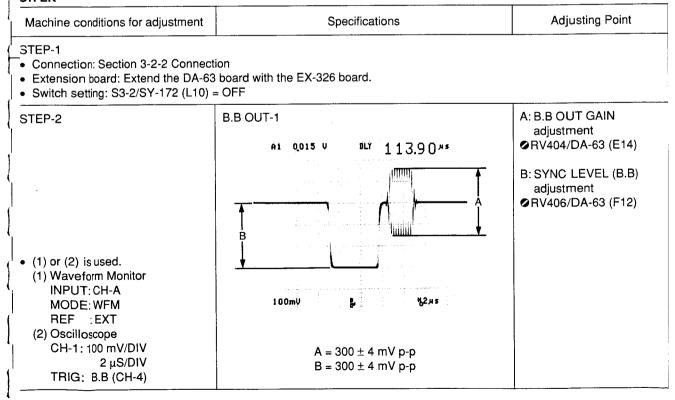
(3-3-7. MODURATION AXIS & B.B BURST BALANCE Adjustment (FOR EK ONLY))

Machine conditions for adjustment	Specifications	Adjusting Point
STEP-3	B.B OUT-1 NG PRESETS	BURST BALANCE adjustment PRV401/DA-63 (E9)
• Vectorscope 75%	OK PRESETS	
75% L.DISP: VECT INPUT: CH-A FILTER: FLAT GAIN: VAR REF: EXT	A = 90 ± 0.5° • Adjust ⊘RV401 so that the specification above is satisfied.	

₀-3-8. B.B OUTPUT GAIN Adjustment

FOR UC

Machine conditions for adjustmen	nt Specifications	Adjusting Point
STEP-1 Connection: Section 3-2-2 Conr Extension board: Extend the DA Switch setting: S3-2/SY-172 (L1	-63 board with the EX-326 board.	
• (1) or (2) is used. (1) Waveform Monitor iNPUT: CH-A MODE: WFM REF: EXT (2) Oscilloscope CH-1: 100 mV/DIV 2 µS/DIV TRIG: B.B (CH-4)	B.B OUT-1 A1 -0075 V 55.16 A B -	A: B.B OUT GAIN adjustment PRV404/DA-63 (E14) B: SYNC LEVEL (B.B) adjustment PRV406/DA-63 (F12)



3-3-9. B.B BURST PHASE & WIDTH Adjustment

Machine conditions for adjustment	Specifications	Adjusting Point
STEP-1 Connection: Section 3-2-2 Connection: Extension board: Extend the DA-6 Switch setting: S3-2/SY-172 (L10)	3 board with the EX-326 board.	
• (1) or (2) is used. (1) Waveform Monitor INPUT: CH-A MODE: WFM REF: EXT (2) Oscilloscope CH-1: 100 mV/DIV 2 µS/DIV TRIG: B.B (CH4)	B.B OUT-1 $A = 5.3 \pm 0.1 \mu\text{S}$ $A = 2.5 \pm 0.1 \mu\text{S}$ $B = 2.5 \pm 0.1 \mu\text{S}$ $A = 2.5 \pm 0.1 \mu\text$	A: BURST PHASE adjustment RV9/DA-63 (B12) B: BURST WIDTH adjustment RV8/DA-63 (B12)

راع-3-9. B.B BURST PHASE & WIDTH Adjustment)

Machine conditions for adjustment	Specifications	Adjusting Point
STEP-1 Connection: Section 3-2-2 Connection: Extension board: Extend the DA-6: Switch setting: S3-2/SY-172 (L10)	3 board with the EX-326 board.	
• (1) or (2) is used. (1) Waveform Monitor INPUT: CH-A MODE: WFM REF: EXT (2) Oscilloscope CH-1: 100 mV/DIV 2 µS/DIV TRIG: B.B (CH4)	B.B OUT-1 A1 0,015 V DLY 113.9 0 μs 100mV 25% A = 5.60 ± 0.1 μS B = 2.25 ± 0.1 μS • Adjust ②RV8 and ②RV9 so that the specifications above are satisfied. • The 50% and 25% indicate the 50% of the SYNC level and the 25% of the BURST level.	A: BURST PHASE adjustment RV9/DA-63 (B12) B: BURST WIDTH adjustment RV8/DA-63 (B12)

3-3-10. KEY OUT GAIN Adjustment

Machine conditions for adjustment

STEP-1 Connection: Section 3-2-2 Connect Extension board: Extend the DA-63 Switch setting: S3-2/SY-172 (L10) = S3-2/SY-172 (L10) = Control panel setting: Select the PATTERN NUMBER Push the AUTO TRANS button	board with the EX-326 board. = ON(For UC) = OFF(For EK) R = 1100.	
STEP-2	KEY OUT	KEY GAIN adjustment ⊘ RV516/DA-63 (H14)
(1) or (2) is used. (1) Waveform Monitor INPUT: CH-A MODE: WFM REF : EXT (2) Oscilloscope CH-1: 200 mV/DIV 10 μS/DIV TRIG: B.B (CH4)	200my	O N V S T O J D N V S (T T Y)
STEP-3 • Change the Oscilloscope setting to 200 mS/DIV. Same as STEP-2 except above setting.	B = 1050 ± 30 nS • While changing S101 from 0 to F one level at a	(Check)
	time, check that the phase of the waveform gradually delays. Also check that the above specification is satisfied when it changes from F to 0.	

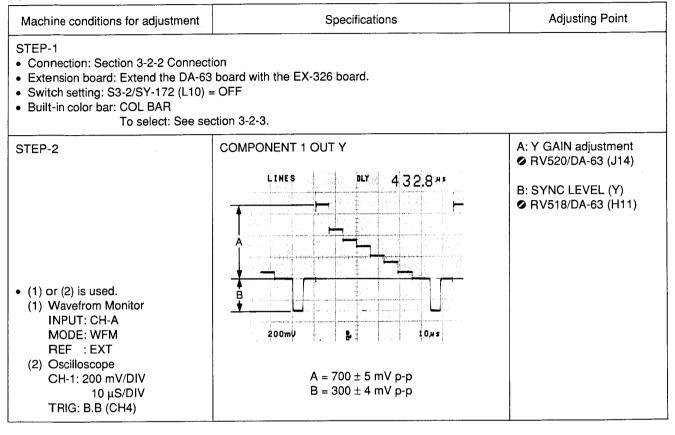
Specifications

Adjusting Point

o-3-11. PGM OUT COMPONENT Y GAIN Adjustment

Machine conditions for adjustment	Specifications	Adjusting Point
 STEP-1 Connection: Section 3-2-2 Connection: Section 3-2-2 Connection: Extend the DA-6 Switch setting: S3-2/SY-172 (L10) Built-in color bar: COL BAR To select: See sections 	3 board with the EX-326 board. = ON	
• (1) or (2) is used. (1) Waveform Monitor INPUT: CH-A MODE: WFM REF: EXT (2) Oscilloscope CH-1: 200 mV/DIV 10 µS/DIV TRIG: B.B (CH4)	COMPONENT 1 OUT Y A	A: Y GAIN adjustment RV520/DA-63 (J14) B: SYNC LEVEL (Y) RV518/DA-63 (H11)

(3-3-11. PGM OUT COMPONENT Y GAIN Adjustment)



ა-3-12. PGM OUT BLK PHASE & WIDTH Adjustment

Machine conditions for adjustment	Specifications	Adjusting Point
STEP-1 Connection: Section 3-2-2 Connect Extension board: Extend the DA-63 Switch setting: S3-2/SY-172 (L10) S3-2/SY-172 (L10) Built-in color bar: COL BKGD (1009 To select: See se	B board with the EX-326 board. = ON(For UC) = OFF(For EK) % WHITE)	
• (1) or (2) is used. (1) Waveform Monitor INPUT: CH-B1 MODE: WFM REF: EXT (2) Oscilloscope CH-1: 200 mV/DIV 2 µS/DIV TRIG: B.B (CH4)	A = 1.5 ± 0.1 μS B = 10.9 ± 0.1 μS (For UC) 12.0 ± 0.1 μS (For EK) Adjust PV6 and PRV7 so that the specifications above are satisfied. The 50% above indicates the 50% of the levels of both VIDEO and SYNC respectively.	A: BLK PHASE adjustment RV7/DA-63 (B11) B: BLK WIDTH adjustment RV6/DA-63 (B11)

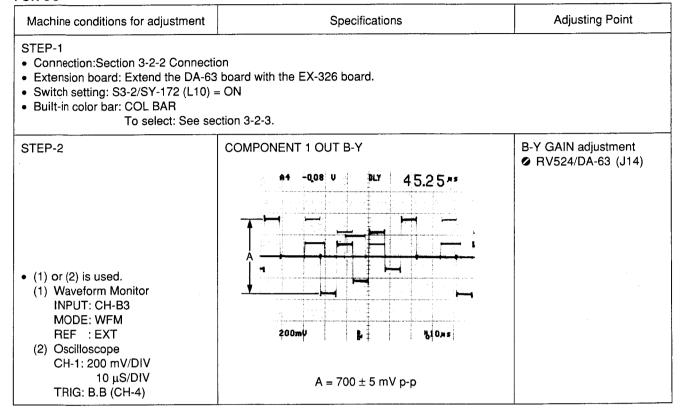
3-3-13. PGM OUT COMPONENT R-Y GAIN Adjustment

Machine conditions for adjustment	Specifications	Adjusting Point
STEP-1 Connection: Section 3-2-2 Connection: Section 3-2-2 Connection: Extend the DA-6 Switch setting: S3-2/SY-172 (L10) Built-in color bar: COLOR BAR To select: See s	3 board with the EX-326 board. = ON	
• (1) or (2) is Used. (1) Wavefrom Monitor INPUT: CH-B2 MODE: WFM REF: EXT (2) Oscilloscope CH-1: 200 mV/DIV 10 μS/DIV TRIG: B.B (CH-4)	COMPONENT 1 OUT R-Y 45.25* 200ml A = 700 ± 5 mV p-p	R-Y GAIN adjustment RV522/DA-63 (J14)

(3-3-13. PGM OUT COMPONENT R-Y GAIN Adjustment)

Machine conditions for adjustment	Specifications	Adjusting Point
STEP-1 Connection: Section 3-2-2 Connection: Section 3-2-2 Connection: Extend the DA-60 Switch setting: S3-2/SY-172 (L10) Built-in color bar: COLOR BAR To select: See sections	3 board with the EX-326 board. = OFF	,
• (1) or (2) is Used. (1) Wavefrom Monitor INPUT: CH-B2 MODE: WFM REF: EXT (2) Oscilloscope	COMPONENT 1 OUT R-Y LINES DLY 439.1 AS 200mb B 10AS	R-Y GAIN adjustment RV522/DA-63 (J14)
CH-1: 200 mV/DIV 10 μS/DIV TRIG: B.B (CH-4)	A = 525 ± 7 mV p-p	

3-3-14. PGM OUT COMPONENT B-Y GAIN Adjustment



ری-3-14. PGM OUT COMPONENT B-Y GAIN Adjustment)

Machine conditions for adjustment	Specifications	Adjusting Point
 STEP-1 Connection:Section 3-2-2 Connect Extension board: Extend the DA-6 Switch setting: S3-2/SY-172 (L10) Built-in color bar: COL BAR To select: See se 	3 board with the EX-326 board. = OFF	
STEP-2	COMPONENT 1 OUT B-Y	B-Y GAIN adjustment RV524/DA-63 (J14)
	LINES DLY 439.145	
•		
(1) or (2) is used. (1) Waveform Monitor		
INPUT: CH-B3 MODE: WFM		
REF : EXT (2) Oscilloscope	200mV <u>в</u> 10дз	
CH-1: 200 mV/DIV 10 μS/DIV TRIG: B.B (CH-4)	A = 525 ± 7 mV p-p	

3-3-15. Y/R-Y DELAY Adjustment

Adjusting Point Machine conditions for adjustment Specifications STEP-1 • Connection: Section 3-2-2 Connection • Extension board: Extend the DA-63 board with the EX-326 board. • Switch setting: S3-2/SY-172 (L10) = ON(For UC) S3-2/SY-172 (L10) = OFF(For EK) Built-in color bar: COL BAR To select: See section 3-2-3. CH-B1: PGM OUT (COMPONENT Y) R-Y DELAY adjustment STEP-2 CH-B2: PGM OUT (COMPONENT R-Y) · Observe the fourth gradation of the component color bars (line between green and magenta) by 5.8 yS/DIV enlarging the time axis. CH-B2 CH-B1 .25 pS/DIV Waveform monitor INPUT: CH-B1 (COMPONENT Y) · Adjust so that the Y and R-Y signals have the same (COMPONENT R-Y) MODE: OVERLAY (Adjust so that the line between green and magenta REF : EXT become equal.)

ა-3-16. Y/B-Y DELAY Adjustment

Machine conditions for adjustment

Specifications

Adjusting Point

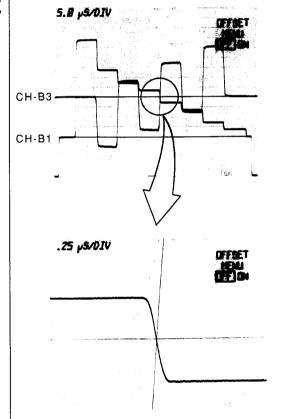
STEP-1

- Connection: Section 3-2-2 Connection
- Extension board: Extend the DA-63 board with the EX-326 board.
- Switch setting: S3-2/SY-172 (L10) = ON(For UC)
 S3-2/SY-172 (L10) = OFF(For EK)
- Built-in color bar: COL BAR

To select: See section 3-2-3.

STEP-2

 Observe the fourth gradation of the component color bars (line between green and magenta) by enlarging the time axis. CH-B1: PGM OUT (COMPONENT Y) CH-B3: PGM OUT (COMPONENT B-Y)



B-Y DELAY adjustment ◆ RV523/DA-63 (J11)

 Waveform monitor INPUT: CH-B1

(COMPONENT Y)

СН-ВЗ

(COMPONENT B-Y)

MODE: OVERLAY

REF : EXT

 Adjust so that the Y and B-Y signals have the same phase.

(Adjust so that the line between green and magenta become equal.)



3-3-17. COMPOSITE SC LEAK BALANCE Adjustment

Machine conditions for adjustment	Specifications	Adjusting Point
 STEP-1 Connection: Section 3-2-2 Connection: Section 3-2-2 Connection: Extend the DA- Switch setting: S3-2/SY-172 (L10) Built-in color bar: COL BAR To select: See 	63 board with the EX-326 board.)) = ON	
• (1) or (2) is used. (1) Waveform Monitor INPUT: CH-A MODE: WFM REF: EXT (2) Oscilloscope CH-1: 100 mV/DIV 2 µS/DIV TRIG: B.B (CH-4)	COMPOSITE OUT-1 A4 -QD8 V DLY 55.66 AB A = Below 20 mV p-p (Adjust to minimum.)	SC LEAK (R-Y) adjustment RV511/DA-63 (H7) SC LEAK (B-Y) adjustment RV514/DA-63 (H8)

(ತ-3-17. COMPOSITE SC LEAK BALANCE Adjustment)

Machine conditions for adjustment	Specifications	Adjusting Point
 STEP-1 Connection: Section 3-2-2 Connection: Extension board: Extend the DA-6 Switch setting: S3-2/SY-172 (L10) Built-in color bar: COL BAR To select: See s 	3 board with the EX-326 board. = OFF	
• (1) or (2) is used. (1) Waveform Monitor INPUT: CH-A MODE: WFM REF: EXT (2) Oscilloscope CH-1: 100 mV/DIV 2 µS/DIV TRIG: B.B (CH-4)	COMPOSITE OUT-1 A1 0,015 V DLY 113.90 As 100mV \$ \$2As A = Below 20 mV p-p (Adjust to minimum.)	SC LEAK (R-Y) adjustment RV511/DA-63 (H7) SC LEAK (B-Y) adjustment RV514/DA-63 (H8)

3-3-18. COMPOSITE Y GAIN Adjustment

Machine conditions for adjustmen	nt Specifications	Adjusting Point
Switch setting: S3-2/SY-172 (L1Built-in color bar: COL BAR	A-63 board with the EX-326 board.	
• (1) or (2) is used. (1) Waveform Monitor INPUT: CH-A MODE: WFM REF: EXT (2) Oscilloscope CH-1: 200 mV/DIV 10 µS/DIV TRIG: B.B (CH-4)	COMPOSITE OUT-1 A4 -0.08 V DLY 35.75 A5 A = 714 ± 5 mV p-p B = 286 ± 4 mV p-p	A: COMPOSITE GAIN adjustment RV507/DA-63 (K14) B: SYNC LEVEL adjustment RV504/DA-63 (L10)

ري-3-18. COMPOSITE Y GAIN Adjustment)

Machine conditions for adjustment	Specifications	Adjusting Point
 STEP-1 Connection: Section 3-2-2 Conne Extension board: Extend the DA-6 Switch setting: S3-2/SY-172 (L10 Built-in color bar: COL BAR To select: See s 	63 board with the EX-326 board.) = OFF	
• (1) or (2) is used. (1) Waveform Monitor INPUT: CH-A MODE: WFM REF: EXT (2) Oscilloscope CH-1: 200 mV/DIV 10 µS/DIV	COMPOSITE OUT-1 LINES DLY 432.8 MS 200mV LOAS A = 700 ± 5 mV p-p B = 300 ± 4 mV p-p	A: COMPOSITE GAIN adjustment RV507/DA-63 (K14) B: SYNC LEVEL adjustment RV504/DA-63 (L10)

3-3-19. MODURATION AXIS Adjustment (FOR UC ONLY)

Machine conditions for adjustment	Specifications	Adjusting Point
STEP-1 Connection: Section 3-2-2 Connect Extension board: Extend the DA-63 Switch setting: S3-2/SY-172 (L10)	board with the EX-326 board.	
 STEP-2 Select the INPUT 1 of BACKGROUND and FOREGROUND. Setting the S1 of COMPONENT in the AD-76 board. Disconnect CH-2 of the signal generator (TSG-300). (Disconnect B-Y signal) Vectorscope 75%, SET UP L.DISP: VECT INPUT: CH-A FILTER: FLAT REF: EXT 	Adjust the phase shift knob of the vectorscope until its luminance points form a vertical line.	
STEP-3 Connect the CH-2 of the signal generator (TSG-300) and disconnect CH-3. (Disconnect B-Y signal) Vectorscope 75%, SET UP L.DISP: VECT INPUT: CH-A FILTER: FLAT REF: EXT	PGM OUT (COMPOSITE) **Tek • Adjust © RV301 until the luminance points on the vectorscope form a horizontal line.	MODURATION AXIS adjustment ◆ RV301/DA-63 (E8)

კ-3-20. COMPOSITE C GAIN Adjustment

Machine conditions for adjustment	Specifications	Adjusting Point	
STEP-1 Connection: Section 3-2-2 Connection Extension board: Extend the DA-63 board with the EX-326 board. Switch setting: S3-2/SY-172 (L10) = ON Built-in color bar: COL BAR To select: See section 3-2-3.			
STEP-2	COMPOSITE OUT-1	C LEVEL adjustment ⊘ RV506/DA-63 (L11)	
	H 15.1 cs B 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	B-Y AXIS LEVEL adjustment ✔ RV512/DA-63 (H8)	
Vectorscope 75%, SET UP L.DISP: VECT INPUT: CH-A FILTER: FLAT REF: EXT	All luminance points should be inside the respective "⊞" mark on the vectorscope. • Adjust ⊘RV506 and ⊘RV521 so that MG, B, CY, G, YL and R satisfy the above specifications.		

(3-3-20. COMPOSITE C GAIN Adjustment)

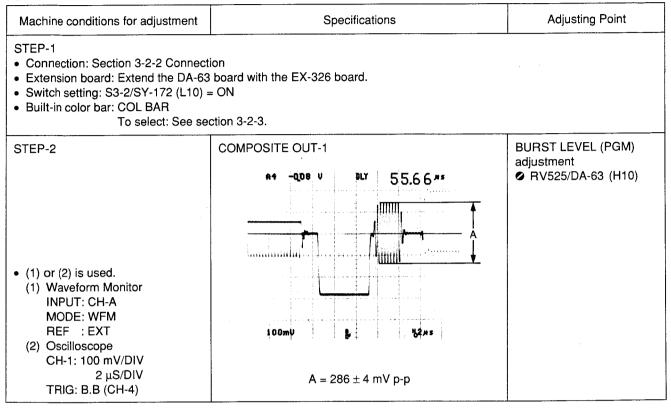
Machine conditions for adjustment	Specifications	Adjusting Point
STEP-1 Connection: Section 3-2-2 Connect Extension board: Extend the DA-63 Switch setting: S3-2/SY-172 (L10) = Built-in color bar: COL BAR To select: See se	board with the EX-326 board. = OFF	
STEP-2	COMPOSITE OUT-1 PRESET9 BURST	C LEVEL adjustment ◆ RV506/DA-63 (L11) B-Y AXIS LEVEL adjustment ◆ RV512/DA-63 (H8)
Vectorscope 75% L.DISP: VECT INPUT: CH-A FILTER: FLAT REF: EXT	All luminance points should be inside the respective "田" mark on the vectorscope. • Adjust ❷RV506 and ❷RV521 so that MG, mg, B, b, CY, cy, G, g, YL, yl, R and r satisfy the above specifications.	

ა-3-21. COMPOSITE BURST BALANCE Adjustment (FOR EK ONLY)

Machine conditions for adjustment	Specifications	Adjusting Point
STEP-1 Connection: Section 3-2-2 Connect Extension board: Extend the DA-63 Switch setting: S3-2/SY-172 (L10) =	board with the EX-326 board.	
STEP-2	NG PRESETS	BURST BALANCE adjustment ✓ RV513/DA-63 (H7)
• Vectorscope	OK PRESETS	
75% L.DISP: VECT INPUT: CH-A FILTER: FLAT REF: EXT	 A = 90 ± 0.5° Set the spot of BURST on the position of circumference by GAIN control on the vector scope. Then adjust ♥RV513 so that A is the specification. 	

3-3-22. COMPOSITE BURST LEVEL Adjustment

FOR UC

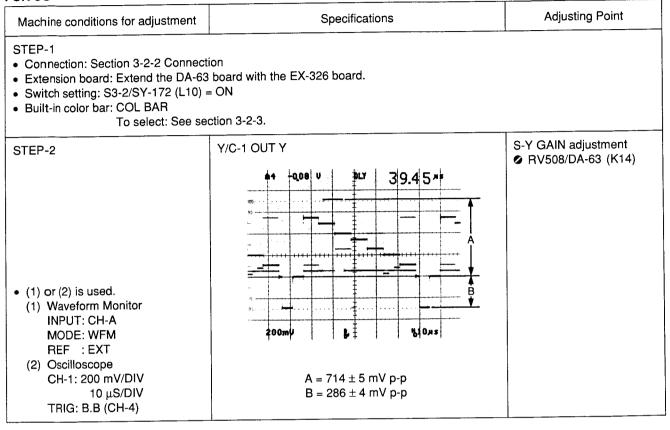


(კ-3-22. COMPOSITE BURST LEVEL Adjustment)

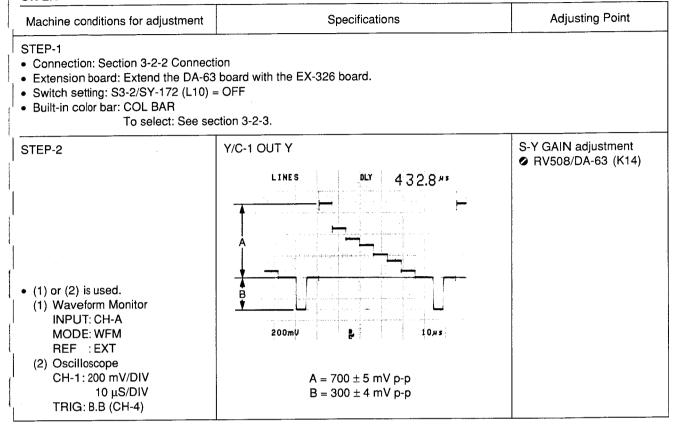
Machine conditions for adjustment	nt Specifications	Adjusting Point
Switch setting: S3-2/SY-172 (L1Built-in color bar: COL BAR	A-63 board with the EX-326 board.	
• (1) or (2) is used. (1) Waveform Monitor INPUT: CH-A MODE: WFM REF: EXT (2) Oscilloscope CH-1: 100 mV/DIV 2 µS/DIV TRIG: B.B (CH-4)	COMPOSITE OUT-1 A1 0,015 V DLY 113.9 0 PS 100mV B	BURST LEVEL (PGM) adjustment RV525/DA-63 (H10)

3-3-23. Y/C (S) Y GAIN Adjustment

FOR UC



3-3-23. Y/C (S) Y GAIN Adjustment)



3-3-24. Y/C (S) C GAIN Adjustment

FOR UC

Machine conditions for adjustment	Specifications	Adjusting Point
STEP-1 Connection: Section 3-2-2 Connect Extension board: Extend the DA-63 Switch setting: S3-2/SY-172 (L10) = Built-in color bar: COL BAR To select: See sec	board with the EX-326 board. = ON	
STEP-2	Y/C-1 OUT C	S-C GAIN adjustment RV509/DA-63 (K14)
Markana and	MG BURST	
 Vectorscope 75%, SET UP L.DISP: VECT INPUT: CH-A FILTER: FLAT 	All luminance points should be inside the respective "⊞" mark on the vectorscope. • Adjust ❷RV509 so that MG, B, CY, G, YL and R	
REF : EXT	satisfy the above specifications.	(Check)
 (1) or (2) is used. (1) Waveform Monitor INPUT: CH-A MODE: WFM REF: EXT (2) Oscilloscope CH-1: 200 mV/DIV 10 μS/DIV 	Y/C-1 OUT C A4 -Q08 V DLY 35.75 A5 200mV 8	·
TRIG: B.B (CH-4)	Check that the above waveform is displayed.	

3-24. Y/C (S) C GAIN Adjustment)

Machine conditions for adjustment	Specifications	Adjusting Point
STEP-1 Connection: Section 3-2-2 Connect Extension board: Extend the DA-63 Switch setting: S3-2/SY-172 (L10) = Built-in color bar: COL BAR To select: See sec	board with the EX-326 board. = OFF	
STEP-2	Y/C-1 OUT C PRESETS	S-C GAIN adjustment RV509/DA-63 (K14)
Vectorscope 75% L.DISP: VECT INPUT: CH-A FILTER: FLAT REF: EXT	BURST All luminance points should be inside the respective "⊞" mark on the vectorscope. • Adjust ❷RV509 so that MG, mg, B, b, CY, cy, G, g, YL, yl, R and r satisfy the above specifications.	
STEP-3 (1) or (2) is used. (1) Waveform Monitor INPUT: CH-A MODE: WFM REF: EXT (2) Oscilloscope CH-1: 200 mV/DIV	Y/C-1 OUT C A1 -0.08 V DLY 35.75 A5 200mV 1 10A5	(Check)
10 μS/DIV TRIG: B.B (CH-4)	Check that the above waveform is displayed.	

3-4. AD-76 BOARD ADJUSTMENTS

3-4-1. COMPONENT CLAMP LEVEL Adjustment

FOR UC

NOTE: Perform this adjustment after completing all the adjustments for the DA-63 board.

Machine conditions for adjustment Specifications Adjusting Point

STEP-1

- Connection: Section 3-2-2 Connection
- Extension board: Extend the AD-76 board with the EX-326 board.
- Test signal: COMPONENT 100% Color Bars
- Switch setting: S1/AD-76 (D1) = COMPONENT

S3-2/SY-172 (L10) = ON

- · Control panel setting:
 - 1. PATTERN NUMBER = 4 (REVERSE = OFF)
 - 2. FADER LEVER = Move it fully to the top and bottom several times and set it at the top.
 - 3. BACKGROUND BUS = 1, FOREGROUND BUS = 2

After completing the above settings, check that the Y signal has been output.

Test points

When adjusting A BUS: TP141/AD-76 (D13)

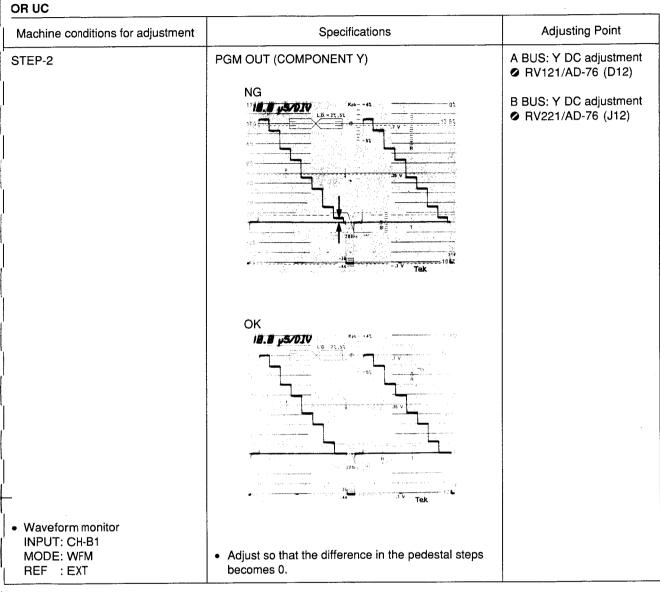
When adjusting B BUS: TP241/AD-76 (J12)

When the waveform is not displayed

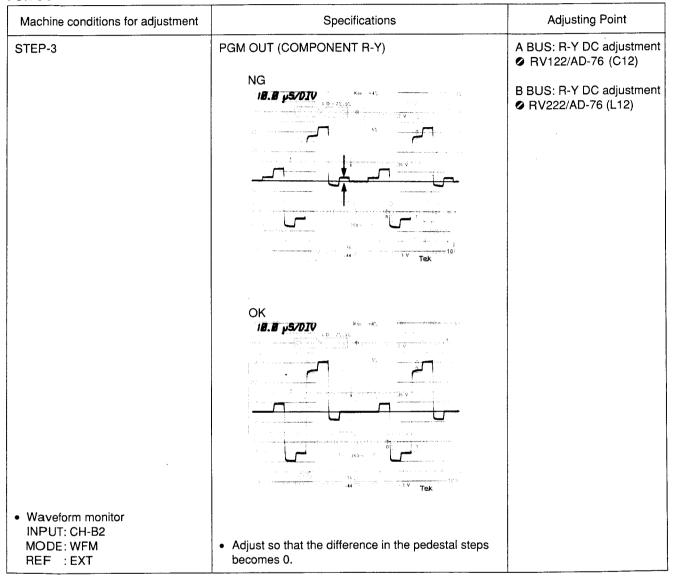
Press the AUTO TRANS button and check that the Y signal has been output at the test point of the adjusted bus.

4. FOREGROUND BUS = INT VIDEO (COL BAR)

NOTE: Adjust A BUS and B BUS in the same way for each bus.



FOR UC



FOR UC

Machine conditions for adjustment	Specifications	Adjusting Point
STEP-4	PGM OUT (COMPONENT B-Y) NG B.B. p5/070 Lg. 25, 55 R R Tek	A BUS: B-Y DC adjustment RV123/AD-76 (B12) B BUS: B-Y DC adjustment RV223/AD-76 (K12)
 Waveform monitor INPUT: CH-B3 MODE: WFM REF: EXT 	OK 18.8 ps/010 Adjust so that the difference in the pedestal steps becomes 0.	

FOR EK

NOTE: Perform this adjustment after completing all the adjustments for the DA-63 board.

Machine conditions for adjustment Specifications Adjusting Point

STEP-1

- Connection: Section 3-2-2 Connection
- Extension board: Extend the AD-76 board with the EX-326 board.
- Test signal: COMPONENT 75% Color Bars
- Switch setting: S1/AD-76 (D1) = COMPONENT

S3-2/SY-172 (L10) = OFF

- · Control panel setting:
 - 1. PATTERN NUMBER = 4 (REVERSE = OFF)
 - 2. FADER LEVER = Move it fully to the top and bottom several times and set it at the top.
 - 3. BACKGROUND BUS = 1, FOREGROUND BUS = 2

After completing the above settings, check that the Y signal has been output.

Test points

When adjusting A BUS: TP141/AD-76 (D13)

When adjusting B BUS: TP241/AD-76 (J12)

When the waveform is not displayed

Press the AUTO TRANS button and check that the Y signal has been output at the test point of the adjusted bus.

4. FOREGROUND BUS = INT VIDEO (COL BAR)

NOTE: Adjust A BUS and B BUS in the same way for each bus.

Machine conditions for adjustment	Specifications	Adjusting Point
STEP-2	PGM OUT (COMPONENT Y) NG 18.8 p5/01V	A BUS: Y DC adjustment RV121/AD-76 (D12) B BUS: Y DC adjustment RV221/AD-76 (J12)
	Tek	⊘ RV221/AD-76 (J12)
·	OK 18.8 p\$/510 Tek	
 Waveform monitor INPUT: CH-B1 MODE: WFM REF: EXT 	Adjust so that the difference in the pedestal steps becomes 0.	

Machine conditions for adjustment	Specifications	Adjusting Point
STEP-3	PGM OUT (COMPONENT R-Y)	A BUS: R-Y DC adjustment RV122/AD-76 (C12)
	NG 18.8 y5/01V	B BUS: R-Y DC adjustment RV222/AD-76 (L12)
	OK IB.B ps.01v Tex	
Waveform monitor INPUT: CH-B2 MODE: WFM REF : EXT	Adjust so that the difference in the pedestal steps becomes 0.	

Machine conditions for adjustment	Specifications	Adjusting Point
STEP-4	PGM OUT (COMPONENT B-Y)	A BUS: B-Y DC adjustmer RV123/AD-76 (B12)
	NG 18.8 µ5/0]V	B BUS: B-Y DC adjustmer RV223/AD-76 (K12)
	Tex	
	OK 18.8 p\$/070	
	Tek	
 Waveform monitor INPUT: CH-B3 MODE: WFM REF: EXT 	Adjust so that the difference in the pedestal steps becomes 0.	

3-4-2. COMPONENT Y LEVEL Adjustment

FOR UC

NOTE: Perform this adjustment after completing all the adjustments for the DA-63 board.

Machine conditions for adjustment Specifications Adjusting Point

STEP-1

- Connection: Section 3-2-2 Connection
- Extension board: Extend the AD-76 board with the EX-326 board.
- Test signal: 100% Color Bars
- Switch setting: S1/AD-76 (D1) = COMPONENT S3-2/SY-172 (L10) = ON
- · Control panel setting:
 - 1. PATTERN NUMBER = 4 (REVERSE = OFF)
 - 2. FADER LEVER = Move it fully to the top and bottom several times and set it at the top.
 - 3. BACKGROUND BUS = 1, FOREGROUND BUS = 2

After completing the above settings, check that the Y signal has been output.

Test points

When adjusting A BUS: TP141/AD-76 (D13)

When adjusting B BUS: TP241/AD-76 (J12)

When the waveform is not displayed

Press the AUTO TRANS button and check that the Y signal has been output at the test point of the adjusted bus.

4. FOREGROUND BUS = INT VIDEO (COL BAR)

NOTE: Adjust A BUS and B BUS in the same way for each bus.

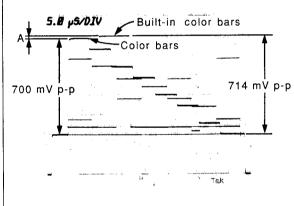
STEP-2

- Position of the fader lever: In the vicinity of the center
- The color bars of input 1 and the white(100%) of the built-in color bar should be seen simultaneously.

 Waveform monitor INPUT: CH-B1 MODE: WFM

MODE: WFM REF : EXT

PGM OUT (COMPONENT Y)



A = 14 mV p-p

Adjust so that the difference between the color bars (Y) of input 1 and the built-in color bars (Y) becomes 14 mV p-p.

A BUS: CPNT Y GAIN adjustment

B BUS: CPNT Y GAIN adjustment

კ-4-2. COMPONENT Y LEVEL Adjustment)

FOR FK

OTE: Perform this adjustment after completing all the adjustments for the DA-63 board.

Machine conditions for adjustment Specifications Adjusting Point

STEP-1

- Connection: Section 3-2-2 Connection
- Extension board: Extend the AD-76 board with the EX-326 board.
- Test signal: 75% Color Bars
- Switch setting: S1/AD-76 (D1) = COMPONENT S3-2/SY-172 (L10) = OFF
- · Control panel setting:
 - 1. PATTERN NUMBER = 4 (REVERSE = OFF)
 - 2. FADER LEVER = Move it fully to the top and bottom several times and set it at the top.
 - 3. BACKGROUND BUS = 1, FOREGROUND BUS = 2

After completing the above settings, check that the Y signal has been output.

Test points

When adjusting A BUS: TP141/AD-76 (D13)

When adjusting B BUS: TP241/AD-76 (J12)

When the waveform is not displayed

Press the AUTO TRANS button and check that the Y signal has been output at the test point of the adjusted bus.

4. FOREGROUND BUS = INT VIDEO (COL BAR)

NOTE: Adjust A BUS and B BUS in the same way for each bus.

STEP-2

Position of the fader lever:
 In the vicinity of the center

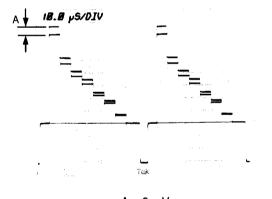
Waveform monitor

INPUT: CH-B1

MODE: WFM

REF : EXT

 The color bars of input 1 and the white(100%) of the built-in color bar should be seen simultaneously. PGM OUT (COMPONENT Y)



- A = 0 mV
- Adjust so that the difference between the color bars (Y) of input 1 and the built-in color bars (Y) becomes 0 mV.

(The color bars (Y) of input 1 and the built-in color

bars (Y) is 700 mV.)

A BUS: CPNT Y GAIN adjustment

RV117/AD-76 (D10)

B BUS: CPNT Y GAIN adjustment

RV217/AD-76 (J11)

3-4-3. COMPONENT CHROMA LEVEL Adjustment

FOR UC

NOTE: Perform this adjustment after completing all the adjustments for the DA-63 board.

Machine conditions for adjustment	Specifications	Adjusting Point

STEP-1

- Connection: Section 3-2-2 Connection
- Extension board: Extend the AD-76 board with the EX-326 board.
- Test signal: 100% Color Bars
- Switch setting: S1/AD-76 (D1) = COMPONENT

S3-2/SY-172 (L10) = ON

- · Control panel setting:
 - 1. PATTERN NUMBER = 4 (REVERSE = OFF)
 - 2. FADER LEVER=Move it fully to the top and bottom several times and set it at the top.
 - 3. BACKGROUND BUS = 1, FOREGROUND BUS = 2

After completing the above settings, check that the Y signal has been output.

Test points

When adjusting A BUS: TP141/AD-76 (D13)

When adjusting B BUS: TP241/AD-76 (J12)

When the waveform is not displayed

Press the AUTO TRANS button and check that the Y signal has been output at the test point of the adjusted bus.

4. FOREGROUND BUS = INT VIDEO (COL BAR)

NOTE: Adjust A BUS and B BUS in the same way for each bus.

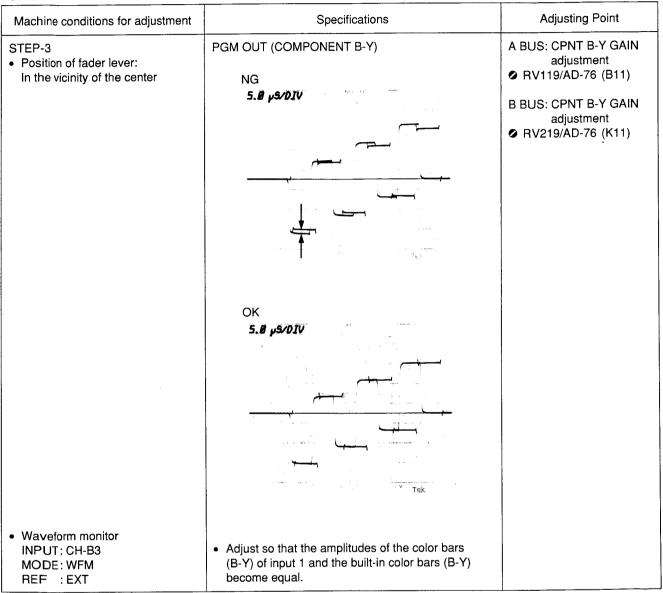
(3-4-3. COMPONENT CHROMA LEVEL Adjustment)

ORUC

Machine conditions for adjustment	Specifications	Adjusting Point
STEP-2 • Position of fader lever: In the vicinity of the center	PGM OUT (COMPONENT R-Y) NG 5.8 µ5/01V	A BUS: CPNT R-Y GAIN adjustment RV118/AD-76 (C11) B BUS: CPNT R-Y GAIN adjustment RV218/AD-76 (L11)
	OK 5.8 ps.010	
Waveform monitor INPUT: CH-B2 MODE: WFM REF : EXT	Adjust so that the amplitudes of the color bars (R-Y) of input 1 and the built-in color bars (R-Y) become equal.	

(3-4-3. COMPONENT CHROMA LEVEL Adjustment)

FOR UC



. კ-4-3. COMPONENT CHROMA LEVEL Adjustment)

FOR EK

OTE: Perform this adjustment after completing all the adjustments for the DA-63 board.

Machine conditions for adjustment Specifications Adjusting Point

STEP-1

- Connection: Section 3-2-2 Connection
- Extension board:Extend the AD-76 board with the EX-326 board.
- Test signal: 75% Color Bars
- Switch setting: S1/AD-76 (D1) = COMPONENT

S3-2/SY-172 (L10) = OFF

- · Control panel setting:
 - 1. PATTERN NUMBER = 4 (REVERSE = OFF)
 - 2. FADER LEVER = Move it fully to the top and bottom several times and set it at the top.
 - 3. BACKGROUND BUS = 1, FOREGROUND BUS = 2

After completing the above settings, check that the Y signal has been output.

Test points

When adjusting A BUS: TP141/AD-76 (D13)

When adjusting B BUS: TP241/AD-76 (J12)

When the waveform is not displayed

Press the AUTO TRANS button and check that the Y signal has been output at the test point of the adjusted bus.

4. FOREGROUND BUS = INT VIDEO (COL BAR)

NOTE: Adjust A BUS and B BUS in the same way for each bus.

(3-4-3. COMPONENT CHROMA LEVEL Adjustment)

Machine conditions for adjustment	Specifications	Adjusting Point
STEP-2 • Position of fader lever: In the vicinity of the center	PGM OUT (COMPONENT R-Y) NG 18.8 p5/010	A BUS: CPNT R-Y GAIN adjustment RV118/AD-76 (C11) B BUS: CPNT R-Y GAIN
	Tek	adjustment RV218/AD-76 (L11)
	οκ 18.8 μ9/0Ιν	
	Tex	
 Waveform monitor INPUT: CH-B2 MODE: WFM REF: EXT 	Adjust so that the amplitudes of the color bars (R-Y) of input 1 and the built-in color bars (R-Y) become equal.	

(J-4-3. COMPONENT CHROMA LEVEL Adjustment)

Machine conditions for adjustment	Specifications	Adjusting Point
STEP-3 • Position of fader lever: In the vicinity of the center	PGM OUT (COMPONENT B-Y) NG ۱۵.۵ پعہری	A BUS: CPNT B-Y GAIN adjustment RV119/AD-76 (B11) B BUS: CPNT B-Y GAIN adjustment RV219/AD-76 (K11)
	Tek	W 219/AD-70 (KTT)
	OK IB.B ps/DIV Tek	
Waveform monitorINPUT: CH-B3MODE: WFMREF : EXT	Adjust so that the amplitudes of the color bars (B-Y) of input 1 and the built-in color bars (B-Y) become equal.	

3-4-4. W HD PHASE Adjustment

FOR UC

Machine conditions for adjustment	Specifications	Adjusting Point			
STEP-1 • Connection: Section 3-2-2 Connection • Extension board: Extend the AD-76 board with the EX-326 board. • Test signal: 100% Color Bars • Switch setting: S1/AD-76 (D1) = COMPONENT S3-2/SY-172 (L10) = ON					
NOTE: Adjust A BUS and B BUS in the	ne same way for each bus.				
STEP-2	A BUS: TP163/AD-76 (A9) B BUS: TP263/AD-76 (M13)	A BUS: VFO BIAS adjustment ✓ LV101/AD-76 (B10)			
Digital voltmeter	2.8 V dc	B BUS: VFO BIAS adjustment ⊘ LV201/AD-76 (N13)			
STEP-3	A BUS CH-1: TP156/AD-76 (A7) CH-2: TP158/AD-76 (A8) B BUS CH-1: TP256/AD-76 (M10) CH-2: TP258/AD-76 (M11) A1 24 V DLY 6 2.5 5 A5 CH-2 CH-1	A BUS: W HD PHASE adjustment RV131/AD-76 (B8) B BUS: W HD PHASE adjustment RV231/AD-76 (N12)			
Oscilloscope MODE: DELAY CH-1: 5 V/DIV 10 µS/DIV CH-2: 2 V/DIV 200 mS/DIV TRIG: CH-1	50 20 g = 4200ns A = B				

ત્3-4-4. W HD PHASE Adjustment)

Machine conditions for adjustment	Specifications	Adjusting Point
 STEP-1 Connection: Section 3-2-2 Connect Extension board: Extend the AD-76 Test signal: 75% Color Bars Switch setting: S1/AD-76 (D1) = C0 S3-2/SY-172 (L10) = 	board with the EX-326 board. DMPONENT	
NOTE: Adjust A BUS and B BUS in the	ne same way for each bus.	
STEP-2	A BUS: TP163/AD-76 (A9) B BUS: TP263/AD-76 (M13)	A BUS: VFO BIAS adjustment LV101/AD-76 (B10)
Digtal voltmeter	2.8 V dc	B BUS: VFO BIAS adjustment ⊘ LV201/AD-76 (N13)
STEP-3	A BUS CH-1: TP156/AD-76 (A7) CH-2: TP158/AD-76 (A8) B BUS CH-1: TP256/AD-76 (M10) CH-2: TP258/AD-76 (M11) A1 420 V DLY 63.12 A5 CH-2 CH-1	A BUS: W HD PHASE adjustment RV131/AD-76 (B8) B BUS: W HD PHASE adjustment RV231/AD-76 (N12)
Oscilloscope MODE: DELAY CH-1: 5 V/DIV 10 µS/DIV CH-2: 2 V/DIV 200 mS/DIV TRIG: CH-1	10 20 A B %200ns A = B	

3-4-5. COMPONENT Y/C DELAY Adjustment

NOTE: Perform this adjustment after completing all the adjustments for the DA-63 board.

Machine conditions for adjustment Specifications

STEP-1

- Connection: Section 3-2-2 Connection
- Extension board: Extend the AD-76 board with the EX-326 board.
- Test signal: BOWTIE
- Switch setting: S1/AD-76 (D1) = COMPONENT S3-2/SY-172 (L10) = ON (For UC) S3-2/SY-172 (L10) = OFF (For EK)
- · Control panel setting:
 - 1. PATTERN NUMBER = 4 (REVERSE = OFF)
 - 2. FADER LEVER = Move it fully to the top and bottom several times and set it at the top.
 - 3. BACKGROUND BUS = 1, FOREGROUND BUS = 2

After completing the above settings, check that the Y signal has been output.

Test points When adjusting A BUS: TP141/AD-76 (D13)

When adjusting B BUS: TP241/AD-76 (J12)

When the waveform is not displayed

Press the AUTO TRANS button and check that the Y signal has been output at the test point of the adjusted bus.

- 4. FOREGROUND BUS = 1
- 5. The signal of A BUS is output at the top of the fader lever.

The signal of B BUS is output at the bottom of the fader lever.

Adjustment can be performed for each bus.

NOTE: Adjust A BUS and B BUS in the same way for each bus.

STEP-2	CH-B1: PGM OUT (COMPONENT Y) CH-B2: PGM OUT (COMPONENT R-Y) CH-B3: PGM OUT (COMPONENT B-Y) 18.8 ps/01V Y/R-Y A Y/B-Y B	Y/R-Y DELAY A BUS: CPNT V DL adjustment FL114/AD-76 (C10) Adjusting point:
Waveform monitor MEASURE: BOWTIE INPUT: CH-B1 (COMPONENTY) CH-B2	Tek	
(COMPONENT R-Y) CH-B3 (COMPONENT B-Y) MODE: WFM REF: EXT	$A = 0 \pm 10 \; \text{nS}$ • Set the each BOWTIE DIP point A and B on the center marker.	NOTE: Do not touch adjusting points other than the above.

Adjusting Point

(3-4-5. COMPONENT Y/C DELAY Adjustment)

Machine conditions for adjustment	Specifications	Adjusting Point
STEP-3	CH-B1:PGM OUT (COMPONENT Y) CH-B2:PGM OUT (COMPONENT R-Y) CH-B3:PGM OUT (COMPONENT B-Y)	Y/B-Y DELAY A BUS: CPNT U DL adjustment FL115/AD-76 (B10) Adjusting point: DG B BUS: CPNT U DL adjustment FL215/AD-76 (K10) Adjusting point: DG
 Waveform monitor MEASURE: BOWTIE INPUT: CH-B1 (COMPONENT Y) CH-B2 	Tex	
(COMPONENT R-Y) CH-B3 (COMPONENT B-Y) MODE: WFM REF: EXT	$B = 0 \pm 10 \; \text{nS}$ • Set the each BOWTIE DIP point A and B on the center marker.	NOTE: Do not touch adjusting points other than the above.

3-4-6. Y/C Input Y LEVEL Adjustment

FOR UC

NOTE: Perform this adjustment after completing all the adjustments for the DA-63 board.

	Machine conditions for adjustment	Specifications	Adjusting Point
ł			

STEP-1

- Connection: Section 3-2-2 Connection
- Extension board: Extend the AD-76 board with the EX-326 board.
- Test signal: 75% Color Bars (100/7.5/77/7.5 Color Bars)
- Switch setting: S1/AD-76 (D1) = Y/C S3-2/SY-172 (L10) = ON
- · Control panel setting:
 - 1. PATTERN NUMBER = 4 (REVERSE = OFF)
 - 2. FADER LEVER = Move it fully to the top and bottom several times and set it at the top.
 - 3. BACKGROUND BUS = 1, FOREGROUND BUS = 2

After completing the above settings, check that the Y signal has been output.

Test points When adjusting A BUS: TP141/AD-76 (D13)

When adjusting B BUS: TP241/AD-76 (J12)

When the waveform is not displayed

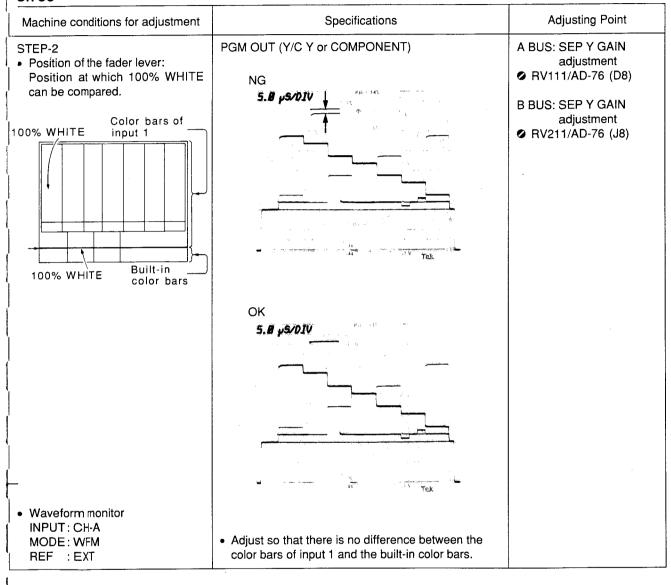
Press the AUTO TRANS button and check that the Y signal has been output at the test point of the adjusted bus.

4. FOREGROUND BUS = INT VIDEO (COL BAR)

NOTE: Adjust A BUS and B BUS in the same way for each bus.

(3-4-6. Y/C Input Y LEVEL Adjustment)

OR UC



(3-4-6. Y/C Input Y LEVEL Adjustment)

FOR EK

NOTE: Perform this adjustment after completing all the adjustments for the DA-63 board.

Machine conditions for adjustment	Specifications	Adjusting Point
		<u> </u>

STEP-1

- Connection: Section 3-2-2 Connection
- Extension board: Extend the AD-76 board with the EX-326 board.
- Test signal: 75% Color Bars
- Switch setting: S1/AD-76 (D1) = Y/C S3-2/SY-172 (L10) = OFF
- Control panel setting:
 - 1. PATTERN NUMBER = 4 (REVERSE = OFF)
 - 2. FADER LEVER = Move it fully to the top and bottom several times and set it at the top.
 - 3. BACKGROUND BUS = 1, FOREGROUND BUS = 2

After completing the above settings, check that the Y signal has been output.

Test points

When adjusting A BUS: TP141/AD-76 (D13)

When adjusting B BUS: TP241/AD-76 (J12)

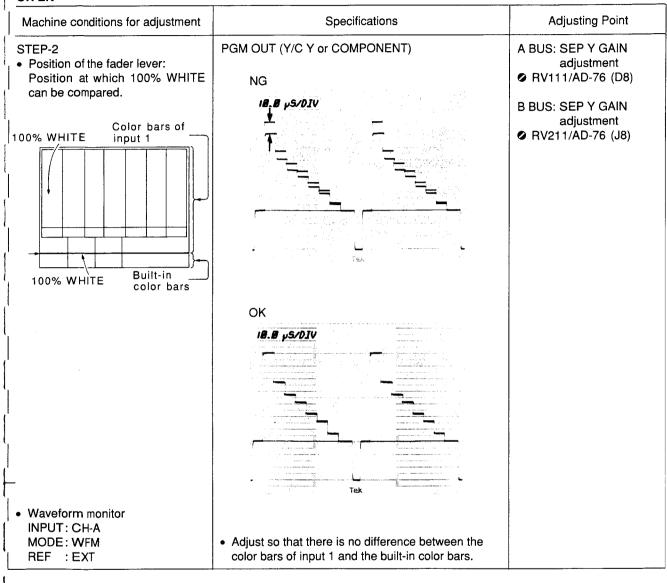
When the waveform is not displayed

Press the AUTO TRANS button and check that the Y signal has been output at the test point of the adjusted bus.

4. FOREGROUND BUS = INT VIDEO (COL BAR)

NOTE: Adjust A BUS and B BUS in the same way for each bus.

(3-4-6. Y/C Input Y LEVEL Adjustment)



3-4-7. CHROMA DECODER CLOCK FREQUENCY Adjustment

FOR UC

Adjusting Point Specifications Machine conditions for adjustment STEP-1 • Connection: Section 3-2-2 Connection • Extension board: Extend the AD-76 board with the EX-326 board. • Test signal: 75% Color Bars (100/7.5/77/7.5 Color Bars) • Switch setting: S1/AD-76 (D1) = Y/C S3-2/SY-172 (L10) = ON• Control panel setting: 1. PATTERN NUMBER = 4 (REVERSE = OFF) 2. FADER LEVER = Move it fully to the top and bottom several times and set it at the top. 3. BACKGROUND BUS = 1, FOREGROUND BUS = 1 NOTE: Adjust A BUS and B BUS in the same way for each bus. A BUS: TP123/AD-76 (D8) A BUS: COLOR F LOCK STEP-2 B BUS: TP223/AD-76 (L8) adjustment CV101/AD-76 (C7) NG B BUS: COLOR F LOCK adjustment O CV201/AD-76 (L7) OK 0,06 V 20µs % 20π3 Oscilloscope CH-1: 20 mV/DIV 20 μS/DIV A = Minimum

TRIG: B.B (CH-4)

3-4-7. CHROMA DECODER CLOCK FREQUENCY Adjustment)

FOR EK

Adjusting Point Machine conditions for adjustment Specifications STEP-1 • Connection: Section 3-2-2 Connection • Extension board: Extend the AD-76 board with the EX-326 board. • Test signal: 75% Color Bars Switch setting: S1/AD-76 (D1) = Y/C S3-2/SY-172 (L10) = OFF • Control panel setting: 1. PATTERN NUMBER = 4 (REVERSE = OFF) 2. FADER LEVER = Move it fully to the top and bottom several times and set it at the top. 3. BACKGROUND BUS = 1, FOREGROUND BUS = 1 NOTE: Adjust A BUS and B BUS in the same way for each bus. A BUS: TP123/AD-76 (D8) A BUS: COLOR F LOCK STEP-2 B BUS: TP223/AD-76 (L8) adjustment CV101/AD-76 (C7) NG B BUS: COLOR F LOCK adjustment O CV201/AD-76 (L7) OK

Oscilloscope

CH-1: 20 mV/DIV 500 μS/DIV TRIG: B.B (CH-4)

• Adjust so that wavefome becomes flat as possible.

3-4-8. Y/C CHROMA LEVEL Adjustment

FOR UC

NOTE: Perform this adjustment after completing all the adjustments for the DA-63 board.

Machine conditions for adjustment Specifications Adjusting Point

STEP-1

- Connection: Section 3-2-2 Connection
- Extension board: Extend the AD-76 board with the EX-326 board.
- Test signal: Y/C (S), 75% Color Bars (100/7.5/77/7.5 Color Bars)
- Switch setting: S1/AD-76 (D1) = Y/C
 - S3-2/SY-172 (L10) = ON
- · Control panel setting:
 - 1. PATTERN NUMBER = 4 (REVERSE = OFF)
 - 2. FADER LEVER = Move it fully to the top and bottom several times and set it at the top.
 - 3. BACKGROUND BUS = 1, FOREGROUND BUS = 2

After completing the above settings, check that the Y signal has been output.

Test points When adjusting A BUS: TP141/AD-76 (D13)

When adjusting B BUS: TP241/AD-76 (J12)

When the waveform is not displayed

Press the AUTO TRANS button and check that the Y signal has been output at the test point of the adjusted bus.

- 4. FOREGROUND BUS = INT VIDEO (COL BAR)
- 5. The signal of A BUS is output at the top of the fader lever.

The signal of B BUS is output at the bottom of the fader lever.

Adjustment can be performed for each bus.

NOTE: Adjust A BUS and B BUS in the same way for each bus.

(3-4-8. Y/C CHROMA LEVEL Adjustment)

DR	UC		

Machine conditions for adjustment	Specifications	Adjusting Point
STEP-2 Adjust to mechanical center. A BUS: RV114	PGM OUT (Y/C C or COMPOSITE) NG	A BUS: SEP C GAIN adjustment PRV112/AD-76 (C7)
B BUS: RV214 Adjust the phase of the chroma. A BUS: RV113	NO TO	CPST & SEP HUE SET adjustment ② RV113/AD-76 (C7)
B BUS: RV213 Adjust in the vertical direction. A BUS: RV112		SEP B-Y GAIN adjustment PRV115/AD-76 (B10)
 B BUS: RV212 Adjust in the horizontal direction. A BUS: RV115 B BUS: RV215 		B BUS: SEP C GAIN adjustment ✔ RV212/AF-76 (L10)
	The state of the s	CPST & SEP HUE SET adjustment ② RV213/AD-76 (L7)
	ОК	SEP B-Y GAIN adjustment ● RV215/AD-76 (K10)
	M. M	
	Tes	
	Tank and the state of the state	
Vectorscope L.DISP: VECT INDUT: CU A	All luminance points should be inside the respective "田" mark on the vectorscope.	
INPUT : CH-A FILTER: FLAT REF : EXT	Adjust so that both the phase and the level A BUS and B BUS of become equal.	



(3-4-8. Y/C CHROMA LEVEL Adjustment)

FOR EK

NOTE: Perform this adjustment after completing all the adjustments for the DA-63 board.

Machine conditions for adjustment Specifications Adjusting Point

STEP-1

- Connection: Section 3-2-2 Connection
- Extension board: Extend the AD-76 board with the EX-326 board.
- Test signal: Y/C (S), 75% Color Bars
- Switch setting: S1/AD-76 (D1) = Y/C

S3-2/SY-172 (L10) = OFF

- · Control panel setting:
 - 1. PATTERN NUMBER = 4 (REVERSE = OFF)
 - 2. FADER LEVER = Move it fully to the top and bottom several times and set it at the top.
 - 3. BACKGROUND BUS = 1, FOREGROUND BUS = 2

After completing the above settings, check that the Y signal has been output.

Test points When adjusting A BUS: TP141/AD-76 (D13)

When adjusting B BUS: TP241/AD-76 (J12)

When the waveform is not displayed

Press the AUTO TRANS button and check that the Y signal has been output at the test point of the adjusted bus.

NOTE: Adjust A BUS and B BUS in the same way for each bus.

(3-4-8. Y/C CHROMA LEVEL Adjustment)

OR EK

Machine conditions for adjustment	Specifications	Adjusting Point
STEP-2 Adjust to mechanical center. A BUS: RV114 B BUS: RV214 Adjust the phase of the chroma. A BUS: RV113 B BUS: RV213 Adjust in the vertical direction. A BUS: RV112 B BUS: RV212 Adjust in the horizontal direction. A BUS: RV115 B BUS: RV215	PGM OUT (Y/C C or COMPOSITE) NG PRESETS OK PRESETS	A BUS: SEP C GAIN adjustment RV112/AD-76 (C7) CPST & SEP HUE SET adjustment RV113/AD-76 (C7) SEP B-Y GAIN adjustment RV115/AD-76 (B10) B BUS: SEP C GAIN adjustment RV212/AF-76 (L10) CPST & SEP HUE SET adjustment RV213/AD-76 (L7) SEP B-Y GAIN adjustment RV215/AD-76 (K10)
Vectorscope L.DISP: VECT INPUT: CH-A FILTER: FLAT REF: EXT	All luminance points should be inside the respective "田" mark on the Vectorscope. • Adjust so that both the phase and the level of A BUS and B BUS become equal.	

3-4-9. Y/C INPUT Y/C DELAY Adjustment

FOR UC

NOTE: Perform this adjustment after completing all the adjustments for the DA-63 board.

Machine conditions for adjustment Specification Adjusting Point	Machine conditions for adjustment	Specification	Adjusting Point
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STEP-1

- Connection: Section 3-2-2 Connection
- Extension board: Extend the AD-76 board with the EX-326 board.
- Test signal: 75% Color Bars (100/7.5/77/7.5 Color Bars)
- Switch setting: S1/AD-76 (D1) = Y/C S3-2/SY-172 (L10) = ON
- · Control panel setting:
 - 1. PATTERN NUMBER = 4 (REVERSE = OFF)
 - 2. FADER LEVER = Move it fully to the top and bottom several times and set it at the top.
 - 3. BACKGROUND BUS = 1, FOREGROUND BUS = 2

After completing the above settings, check that the Y signal has been output.

Test points

When adjusting A BUS: TP141/AD-76 (D13)

When adjusting B BUS: TP241/AD-76 (J12)

When the waveform is not displayed

Press the AUTO TRANS button.

- 4. FOREGROUND BUS = 1
- 5. The signal of A BUS is output at the top of the fader lever.

The signal of B BUS is output at the buttom of the fader lever.

Adjustment can be performed for each bus.

NOTE: Adjust A BUS and B BUS in the same way for each bus.

(3-4-9. Y/C INPUT Y/C DELAY Adjustment)

Machine conditions for adjustment	Specification	Adjusting Point
TEP-2 Observe the fourth gradation of the component color bars (line between green and magenta) by enlarging the time axis.	CH-B1: PGM OUT (COMPONENT Y) CH-B2: PGM OUT (COMPONENT R-Y) 5.8 ps/01v CH-B2 CH-B1	A BUS: Y/R-Y DL adjustment FL111/AD-76 (D9) Adjusting point: DD B BUS: Y/R-Y DL adjustment FL211/AD-76 (L9) Adjusting point: DD
- Waveform monitor INPUT: CH-B1 (COMPONENT Y) CH-B2 (COMPONENT R-Y) MODE: OVERLAY REF: EXT	Adjust so that the phases of the Y and R-Y signals have the same phase. (Adjust so that the line between green and magenta become equal.)	NOTE: Do not touch adjusting points other than the above.



(3-4-9. Y/C INPUT Y/C DELAY Adjustment)

FOR UC

Machine conditions for adjustment	Specifications	Adjusting Point
STEP-3 Observe the fourth gradation of the component color bars (line between green and magenta) by enlarging the time axis.	CH-B1: PGM OUT (COMPONENT Y) CH-B2: PGM OUT (COMPONENT B-Y) 5.8 p\$/01V CH-B3	A BUS: Y/B-Y DL adjustment FL112/AD-76 (C9) Adjusting point: B BUS: Y/B-Y DL adjustment FL212/AD-76 (K9) Adjusting point:
Waveform monitor INPUT: CH-B1	• Adjust so that the phases of the Y and B-Y signals have the same phase. (Adjust so that the line between green and magenta become equal.)	NOTE: Do not touch adjusting points other than the above.

3-4-9. Y/C INPUT Y/C DELAY Adjustment)

FOR FK

OTE: Perform this adjustment after completing all the adjustments for the DA-63 board.

Machine conditions for adjustment Specifications Adjusting Point

STEP-1

- Connection: Section 3-2-2 Connection
- Extension board: Extend the AD-76 board with the EX-326 board.
- Test signal: 75% Color Bars
- Switch setting: S1/AD-76 (D1) = Y/C

S3-2/SY-172 (L10) = OFF

- · Control panel setting:
 - 1. PATTERN NUMBER = 4 (REVERSE = OFF)
 - 2. FADER LEVER = Move it fully to the top and bottom several times and set it at the top.
 - 3. BACKGROUND BUS = 1, FOREGROUND BUS = 2

After completing the above settings, check that the Y signal has been output.

Test points When adjusting A BUS: TP141/AD-76 (D13)

When adjusting B BUS: TP241/AD-76 (J12)

When the waveform is not displayed

Press the AUTO TRANS button.

- 4. FOREGROUND =1
- 5. The signal of A BUS is output at the top of the fader lever.

The signal of B BUS is output at the bottom of the fader lever.

Adjustment can be performed for each bus.

NOTE: Adjust A BUS and B BUS in the same way for each bus.

(3-4-9. Y/C INPUT Y/C DELAY Adjustment)

FOR EK

Machine conditions for adjustment	Specifications	Adjusting Point
STEP-2 Observe the fourth gradation of the component color bars (line between green and magenta) by enlarging the time axis.	CH-B1: PGM OUT (COMPONENT Y) CH-B2: PGM OUT (COMPONENT R-Y) 5. Ø p5/0]V OFFSET HENU OFF ON CH-B2	A BUS: Y/R-Y DL adjustment FL111/AD-76 (D9) Adjusting point: B BUS: Y/R-Y DL adjustment FL211/AD-76 (L9) Adjusting point:
	.50 ps/ojv Offset Menu Off) On Tek	
Waveform monitor INPUT: CH-B1 (COMPONENT Y) CH-B2 (COMPONENT R-Y) MODE: OVERLAY REF: EXT	Adjust so that the phases of the Y and R-Y signals have the same phase. (Adjust so that the line between green and magenta become equal.)	NOTE: Do not touch adjusting points other than the above.

(3-4-9. Y/C INPUT Y/C DELAY Adjustment)

FOR EK

Machine conditions for adjustment	Specifications	Adjusting Point
STEP-3 • Observe the fourth gradation of the component color bars (line between green and magenta) by enlarging the time axis.	CH-B1: PGM OUT (COMPONENT Y) CH-B3: PGM OUT (COMPONENT B-Y) 5.8 ps/01v OFFSET HENU OFFSE	A BUS: Y/B-Y DL adjustment FL112/AD-76 (C9) Adjusting point: B BUS: Y/B-Y DL adjustment FL212/AD-76 (K9) Adjusting point:
	OFFSET MENU OFFSET MENU OFFSET MENU OFFSET MENU OFFSET ON	
Waveform monitor INPUT: CH-B1	Adjust so that the phases of the Y and B-Y signals have the same phase. (Adjust so that the line between green and magenta become equal.)	NOTE: Do not touch adjusting points other than the above.

3-4-10. APC LOCK Adjustment

Machine conditions for adjustment	Specifications	Adjusting Point
STEP-1 Connection: Section 3-2-2 Connection: Extension board: Extend the AD-76 Test signal: 75% Color Bars Switch setting: S1/AD-76 (D1) = C0 S3-2/SY-172 (L10) S3-2/SY-172 (L10) Control panel setting: 1. PATTERN NUMBER = 4 (REVE 2. FADER LEVER = Move it fully to 3. BACKGROUND BUS = 1, FORE	DMPOSITE OMPOSITE OMFORM OM	
◆ Digital voltmeter	A BUS: TP116/AD-76 (G4) B BUS: TP216/AD-76 (H4) A = 3.5 to 4.5 V dc Turn A BUS: PV103 or B BUS: PV203 in the clockwise direction fully and check that the specification above is satisfied.	A BUS: APC LOCK adjustment RV103/AD-76 (F4) B BUS: APC LOCK adjustment RV203/AD-76 (H4)

3-4-10. APC LOCK Adjustment)

Machine conditions for adjustment	Specifications	Adjusting Point
STEP-3 • Digital voltmeter	A BUS: TP116/AD-76 (G4) B BUS: TP216/AD-76 (H4) A = Approx. 2.2 V dc Turn A BUS: ♠RV103 or B BUS: ♠RV203 in the counterclockwise direction fully until the level is drawn into the vicinity of 2.2 V. (color lock condition)	A BUS: APC LOCK adjustment RV103/AD-76 (F4) B BUS: APC LOCK adjustment RV203/AD-76 (H4)
 STEP-4 Disconnect the VIDEO IN BNC connector. Digital voltmeter 	A BUS: TP116/AD-76 (G4) B BUS: TP216/AD-76 (H4) Check that the level becomes approximately 0 V, re-connect the BNC connector of VIDEO IN1 and check that the level becomes approximately 2.2 V dc again.	(Check)

3-4-11. COMPOSITE Y LEVEL Adjustment

FOR UC

Adjusting Point Machine conditions for adjustment Specifications

STEP-1

- Connection: Section 3-2-2 Connection
- Extension board: Extend the AD-76 board with the EX-326 board.
- Test signal: 75% Color Bars (100/7.5/77/7.5 Color Bars)
- Switch setting: S1/AD-76 (D1) = COMPOSITE S3-2/SY-172 (L10) = ON
- · Control panel setting:
 - 1. PATTERN NUMBER = 4 (REVERSE = OFF)
 - 2. FADER LEVER = Move it fully to the top and bottom several times and set it at the top.
 - 3. BACKGROUND BUS = 1, FOREGROUND BUS = 2

After completing the above settings, check that the Y signal has been output.

Test points When adjusting A BUS: TP141/AD-76 (D13)

When adjusting B BUS: TP241/AD-76 (J12)

When the waveform is not displayed

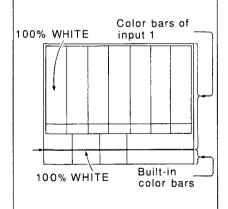
Press the AUTO TRANS button and check that the Y signal has been output at the test point of the adjusted bus.

4. FOREGROUND BUS = INT VIDEO (COL BAR)

NOTE: Adjust A BUS and B BUS in the same way for each bus.

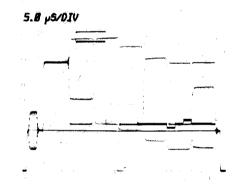
STEP-2

 Position of fader lever: Position at which 100% WHITE can be compared.



 Waveform monitor INPUT: CH-A MODE: WFM REF : EXT

PGM OUT (COMPONENT Y or COMPOSITE)



· Adjust so that there is no difference between the color bars of input 1 and the built-in color bars.

A BUS: CPST Y GAIN adjustment

RV101/AD-76 (E2)

B BUS: CPST Y GAIN adjustment

(3-4-11. COMPOSITE Y LEVEL Adjustment)

FOR EK

	T	I
Machine conditions for adjustment	Specifications	Adjusting Point

STEP-1

- Connection: Section 3-2-2 Connection
- Extension board: Extend the AD-76 board with the EX-326 board.
- Test signal: 75% Color Bars (100/7.5/77/7.5 Color Bars)
- Switch setting: S1/AD-76 (D1) = COMPOSITE S3-2/SY-172 (L10) = OFF
- · Control panel setting:
 - 1. PATTERN NUMBER = 4 (REVERSE = OFF)
 - 2. FADER LEVER = Move it fully to the top and bottom several times and set it at the top.
 - 3. BACKGROUND BUS = 1, FOREGROUND BUS = 2

After completing the above settings, check that the Y signal has been output.

Test points When adjusting A BUS: TP141/AD-76 (D13)

When adjusting B BUS: TP241/AD-76 (J12)

When the waveform is not displayed

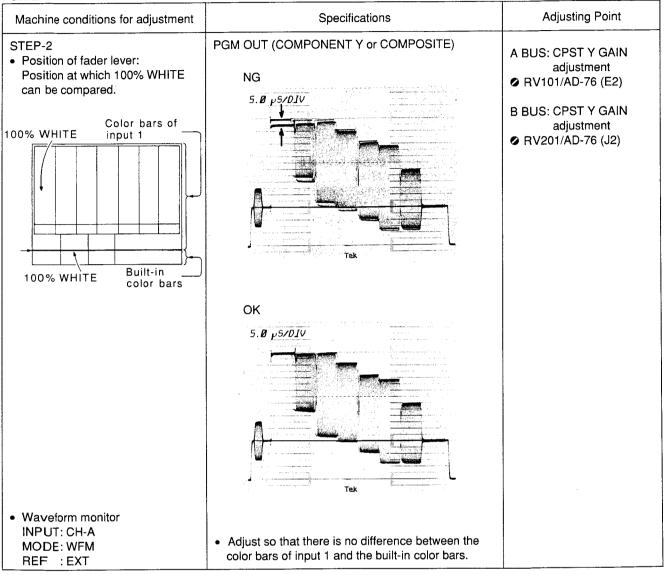
Press the AUTO TRANS button and check that the Y signal has been output at the test point of the adjusted bus.

4. FOREGROUND BUS = INT VIDEO (COL BAR)

NOTE: Adjust A BUS and B BUS in the same way for each bus.

(3-4-11. COMPOSITE Y LEVEL Adjustment)

FOR EK



4-12. COMPOSITE CHROMA LEVEL Adjustment

FOR UC

Adjusting Point Specifications Machine conditions for adjustment STEP-1 • Connection: Section 3-2-2 Connection • Extension board: Extend the AD-76 board with the EX-326 board. • Test signal: 75% Color Bars (100/7.5/77/7.5 Color Bars) Switch setting: S1/AD-76 (D1) = COMPOSITE S3-2/SY-172 (L10) = ON Control panel setting: 1. PATTERN NUMBER = 4 (REVERSE = OFF) 2. FADER LEVER = Move it fully to the top and bottom several times and set it at the top. 3. BACKGROUND BUS = 1, FOREGROUND BUS = 1 NOTE: Adjust A BUS and B BUS in the same way for each bus. A BUS: CPST C GAIN A BUS: TP122/AD-76 (B7) STEP-2 adjustment B BUS: TP222/AD-76 (K7) DLY 100.60 AS 0,06 U B BUS: CPST C GAIN adjustment 410µs 50mV Oscilloscope CH-1: 50 mV/DIV $A = 100 \pm 5 \text{ mV p-p}$

(A: Burst amplitude)

10 μS/DIV

TRIG: B.B (CH-4)

(3-4-12. COMPOSITE CHROMA LEVEL Adjustment)

FOR UC

Machine conditions for adjustment	Specifications	Adjusting Point
STEP-3 • Disconnect the VIDEO IN Connector.	A BUS: TP122/AD-76 (B7) B BUS: TP222/AD-76 (K7)	A BUS: INT BURST LEVEL adjustment ◆ RV116/AD-76 (C4)
	A4 0,06 V DLY 100.60 A*	B BUS: INT BURST LEVEL
		adjustment
	\$0mU 8 0.45	
Oscilloscope CH-1: 50 mV/DIV	A = 100 ± 5 mV p-p	
10 μS/DIV TRIG: B.B (CH-4)	After adjusting to the above specification, connect the VIDEO IN connector.	

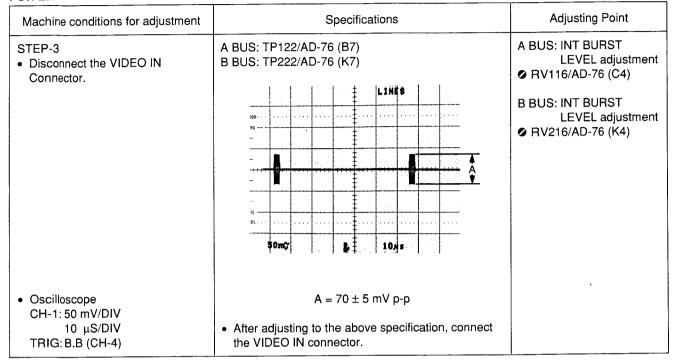
-4-12. COMPOSITE CHROMA LEVEL Adjustment)

FOR EK

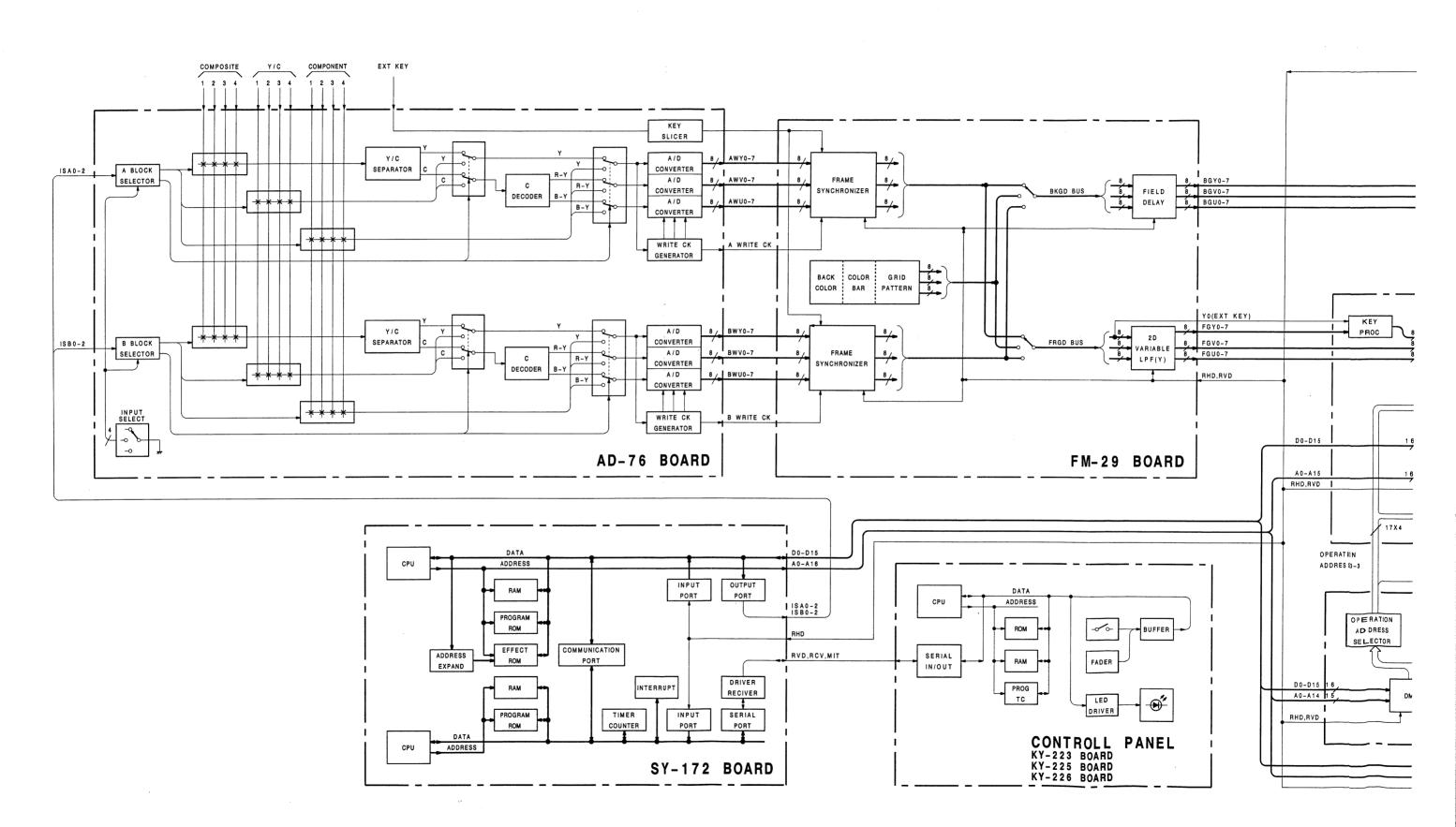
Machine conditions for adjustment	Specifications	Adjusting Point
STEP-1 Connection: Section 3-2-2 Connection: Extension board: Extend the AD-76 Test signal: 75% Color Bars Switch setting: S1/AD-76 (D1) = COS3-2/SY-172 (L10) = Control panel setting: 1. PATTERN NUMBER = 4 (REVER 2. FADER LEVER = Move it fully to 3. BACKGROUND BUS = 1, FORE NOTE: Adjust A BUS and B BUS in the	board with the EX-326 board. OMPOSITE OFF RSE = OFF) the top and bottom several times and set it at the top. GROUND BUS = 1	
STEP-2	A BUS: TP122/AD-76 (B7) B BUS: TP222/AD-76 (K7)	A BUS: CPST C GAIN adjustment RV102/AD-76 (E2) B BUS: CPST C GAIN adjustment RV202/AD-76 (H2)
• Oscilloscope CH-1: 50 mV/DIV 10 μS/DIV TRIG: B.B (CH-4)	A = 100 ± 5 mV p-p (A: Burst amplitude)	

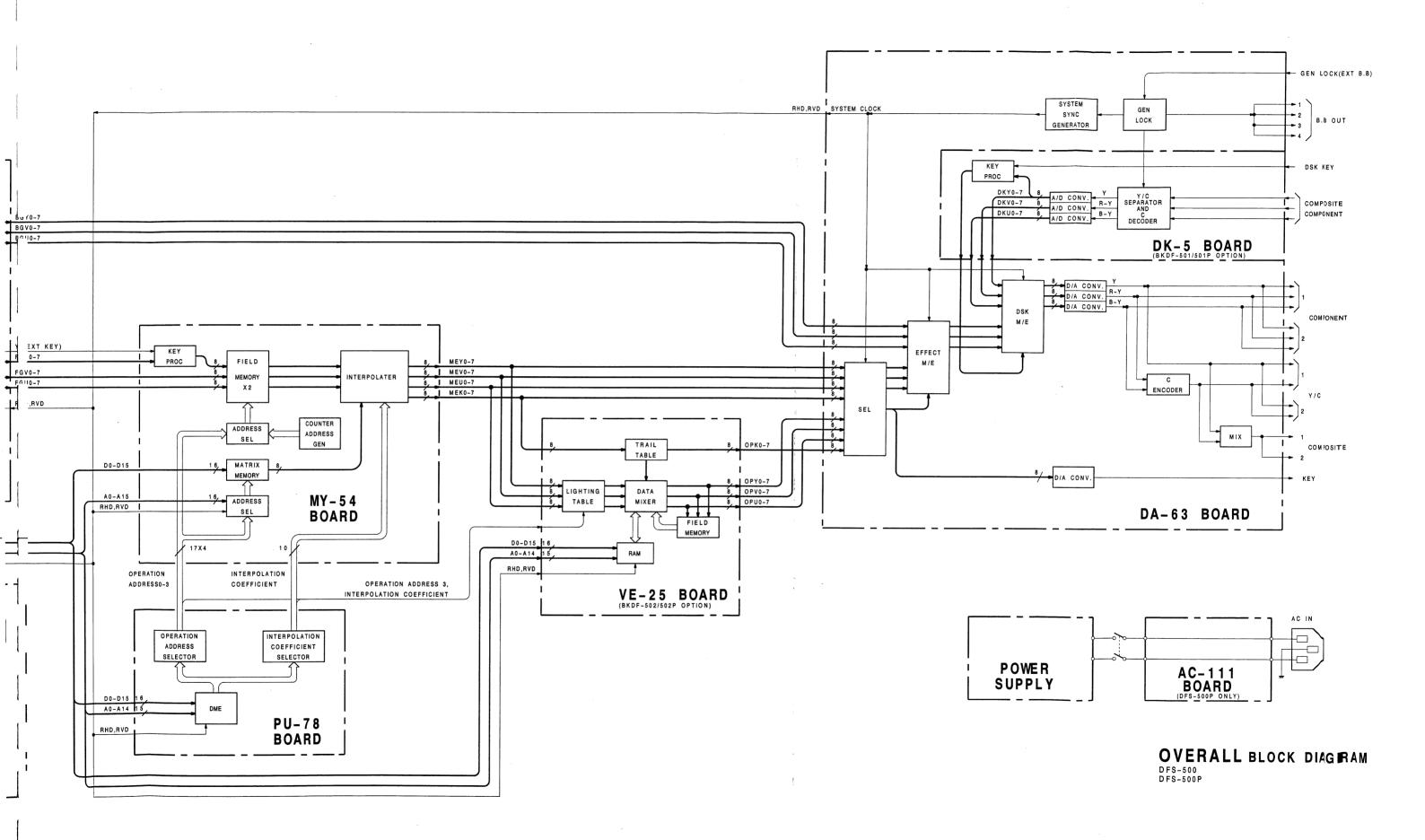
(3-4-12. COMPOSITE CHROMA LEVEL Adjustment)

FOR EK

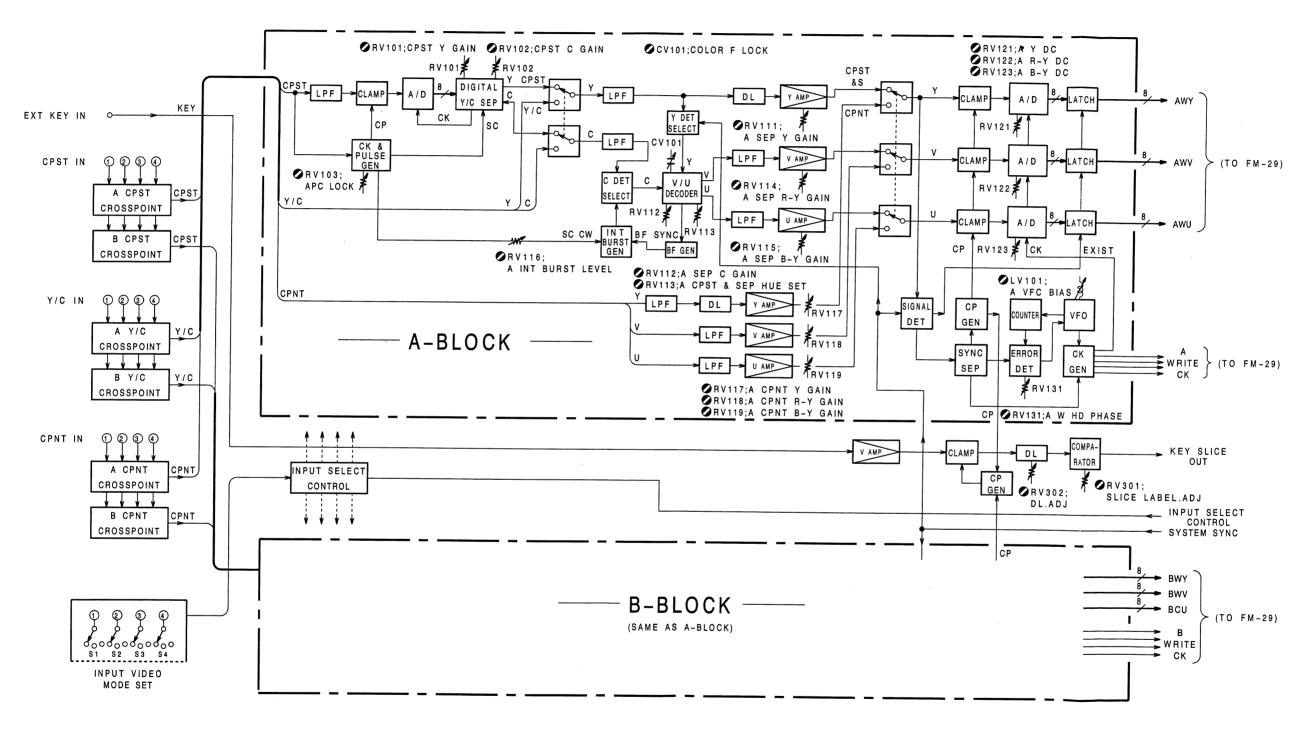


SECTION 4 BLOCK DIAGRAMS





AD-76; A/D Converter



AD-76 BLOCK DIAGRAM
DFS-500
DFS-500P

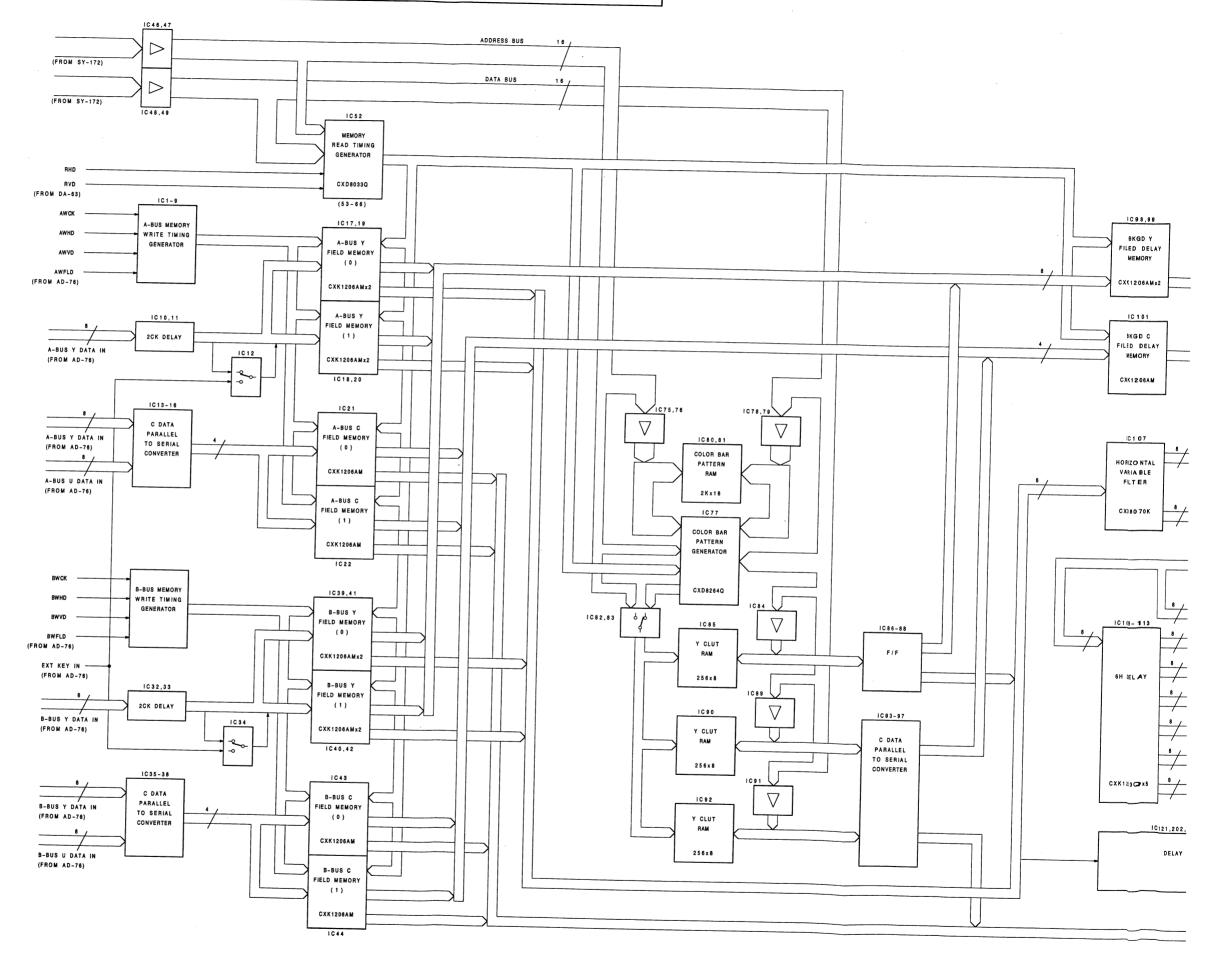
(TO FM-29)

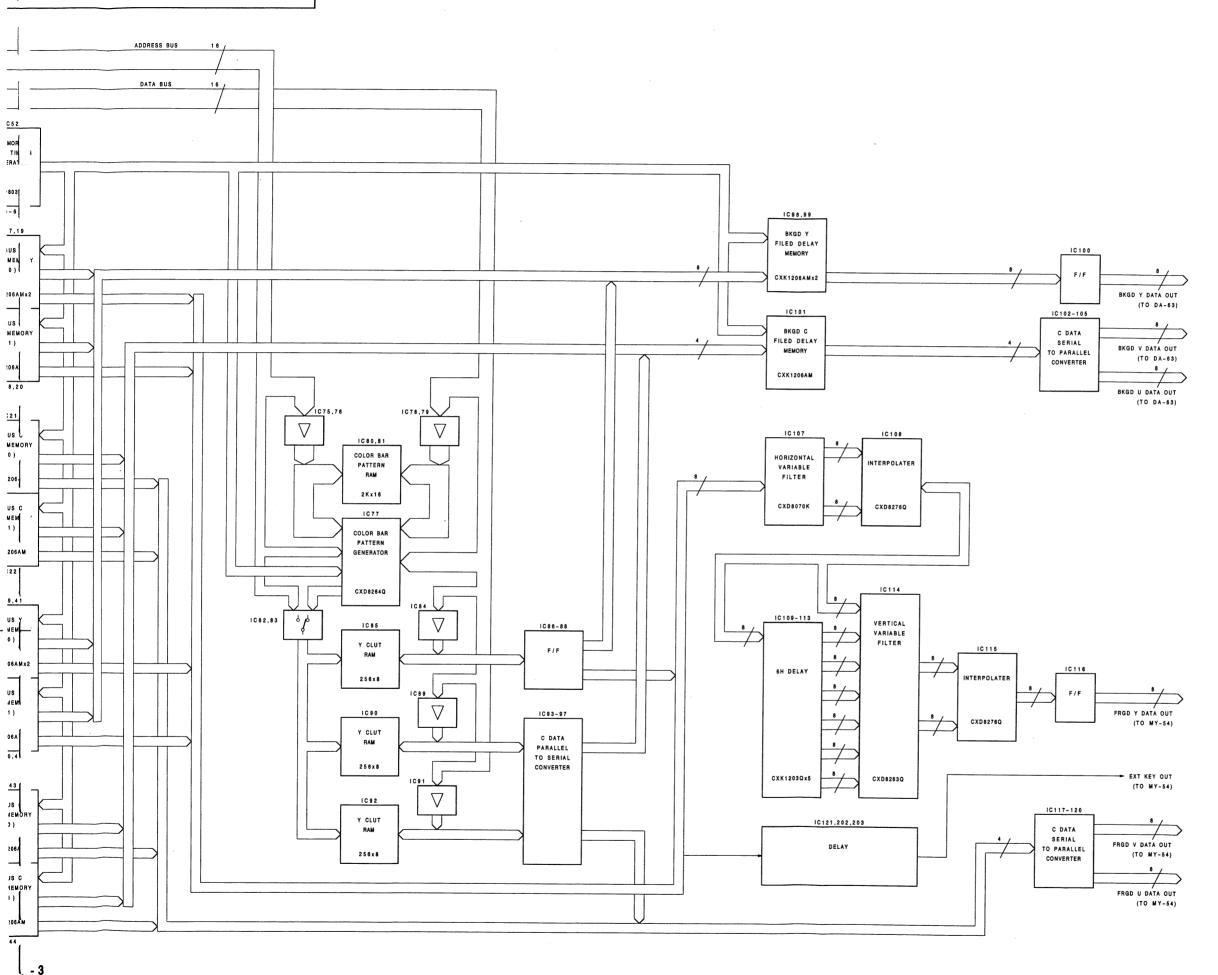
| SL = UT | =

DIAGRAM

TO FM-29)

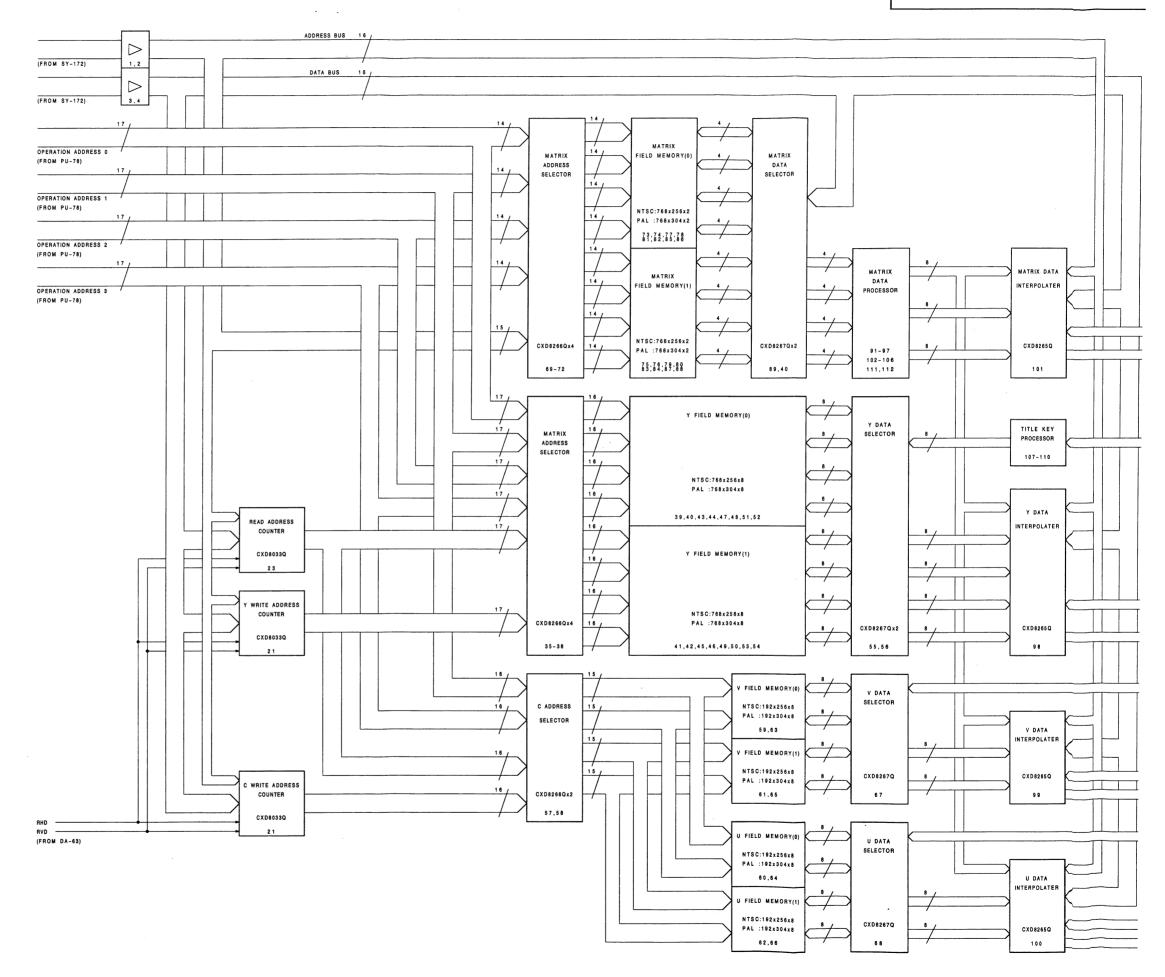
FM-29; Frame Synchronizer

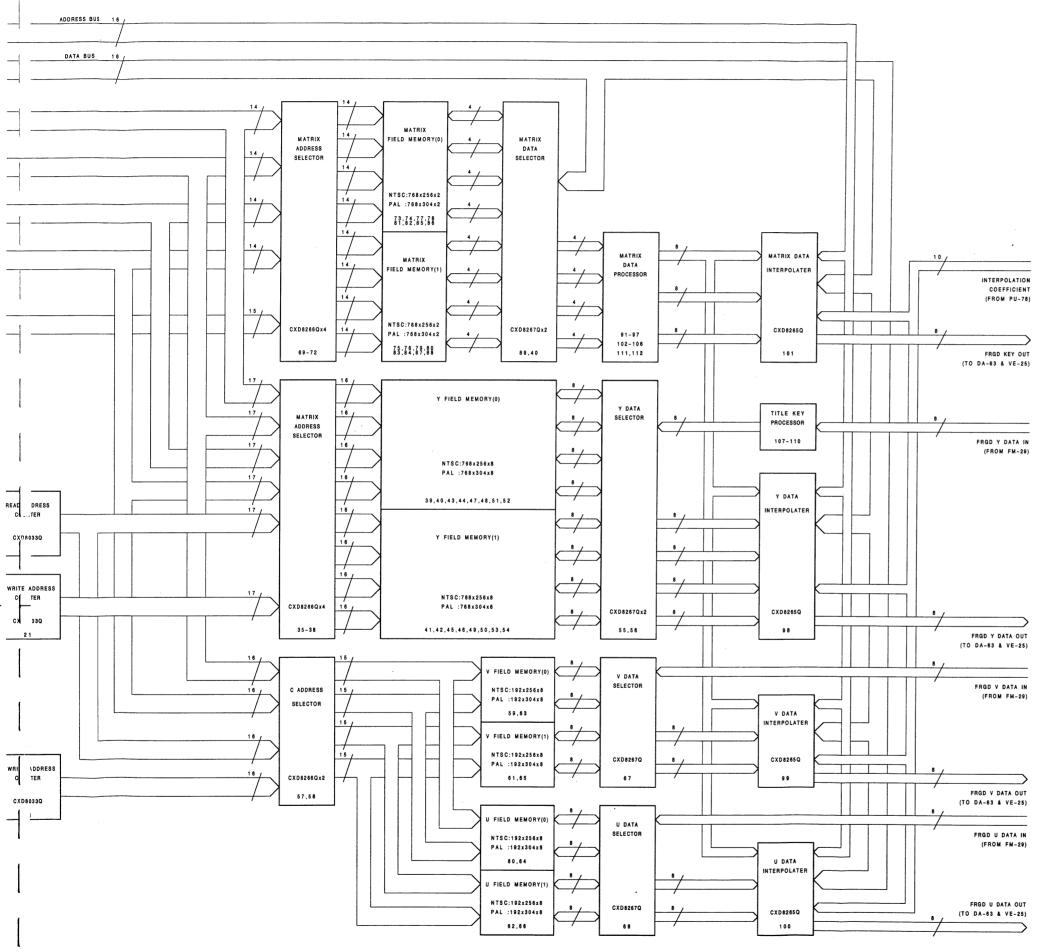




FM-29 BLOCK DIAGRAM
DFS-500
DFS-500P

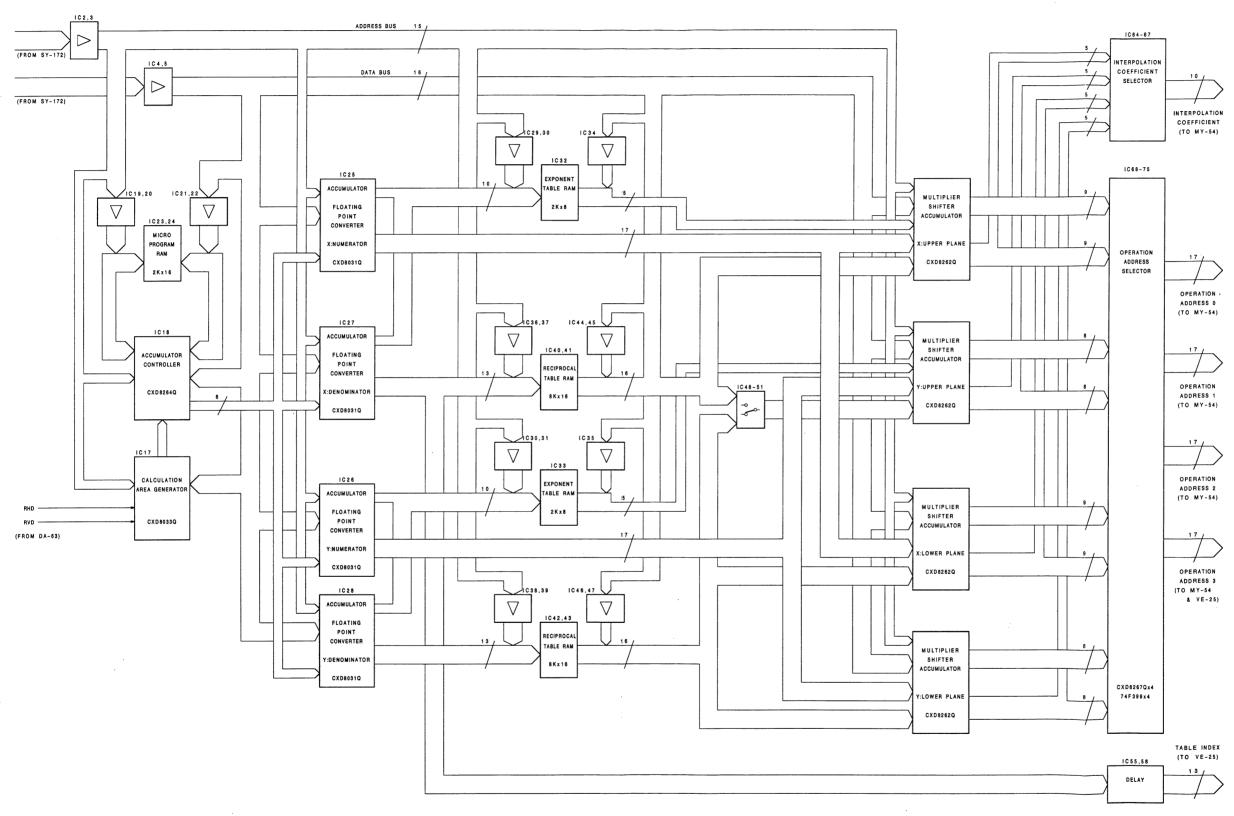
MY-54; Field Memory



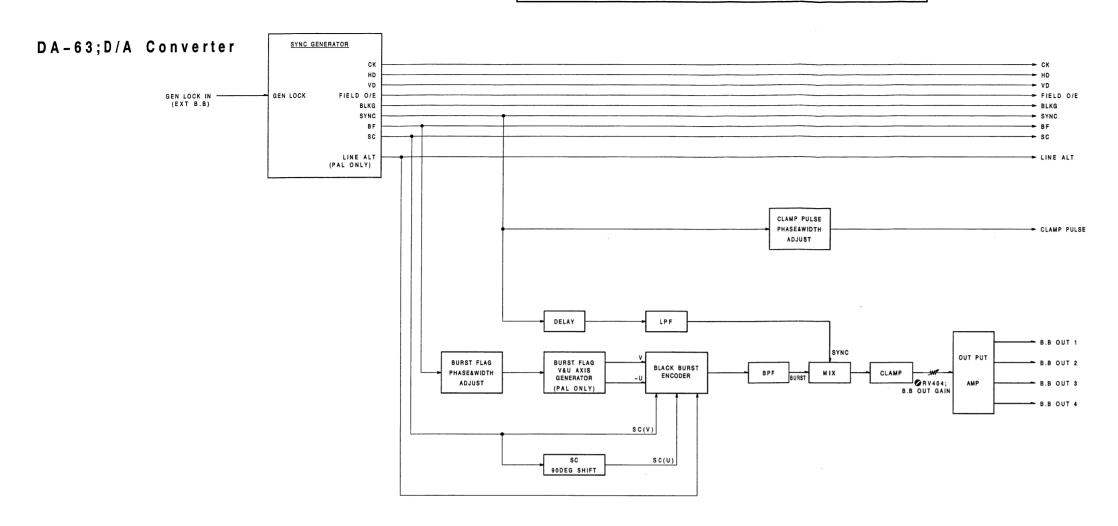


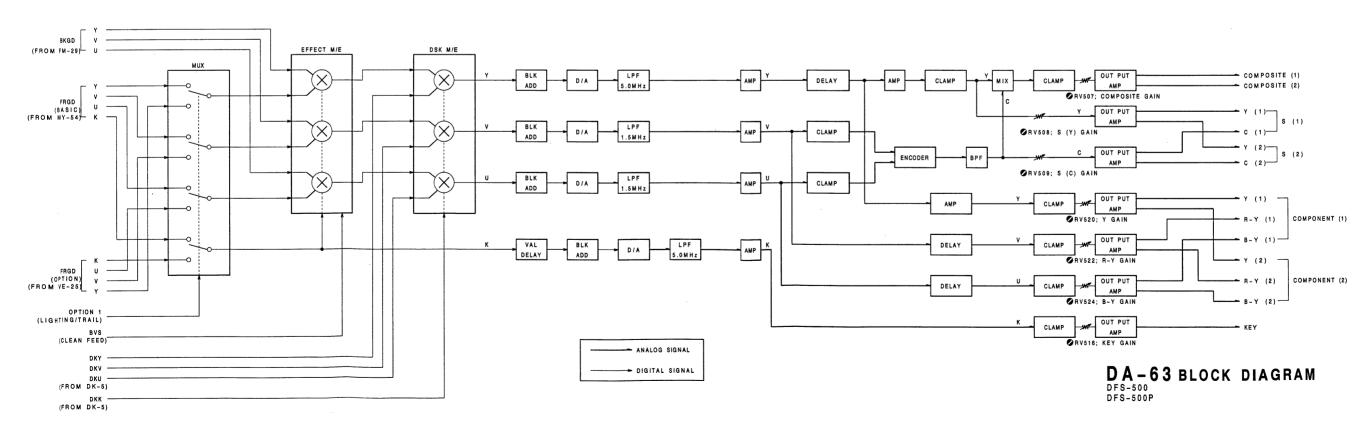
MY-54 BLOCK DIAGRAM
DFS-500P

PU-78; Address Operation

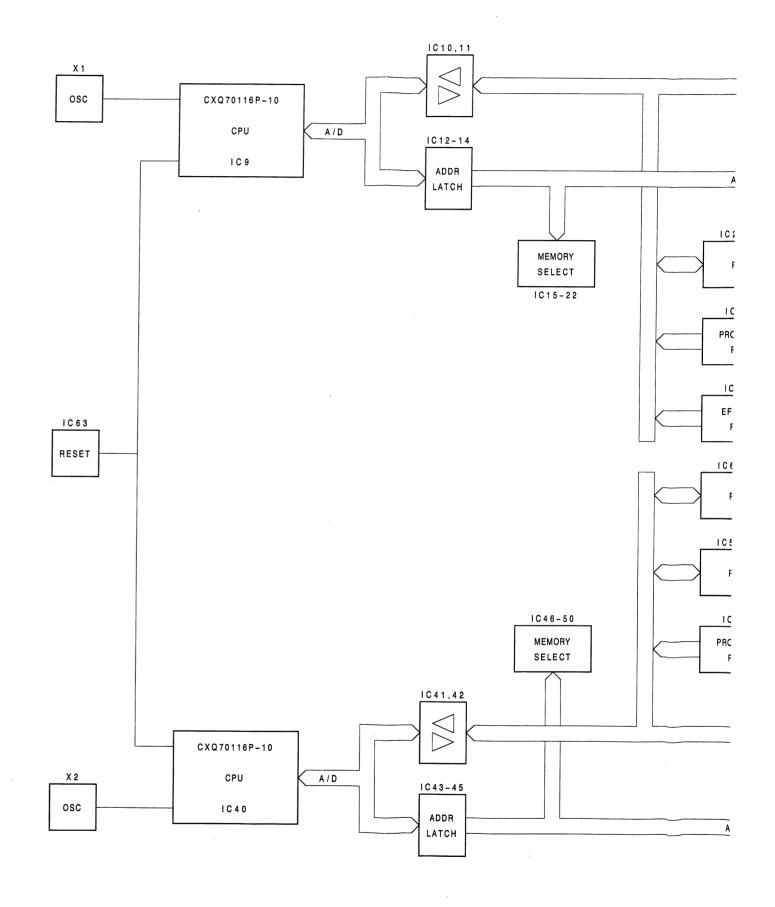


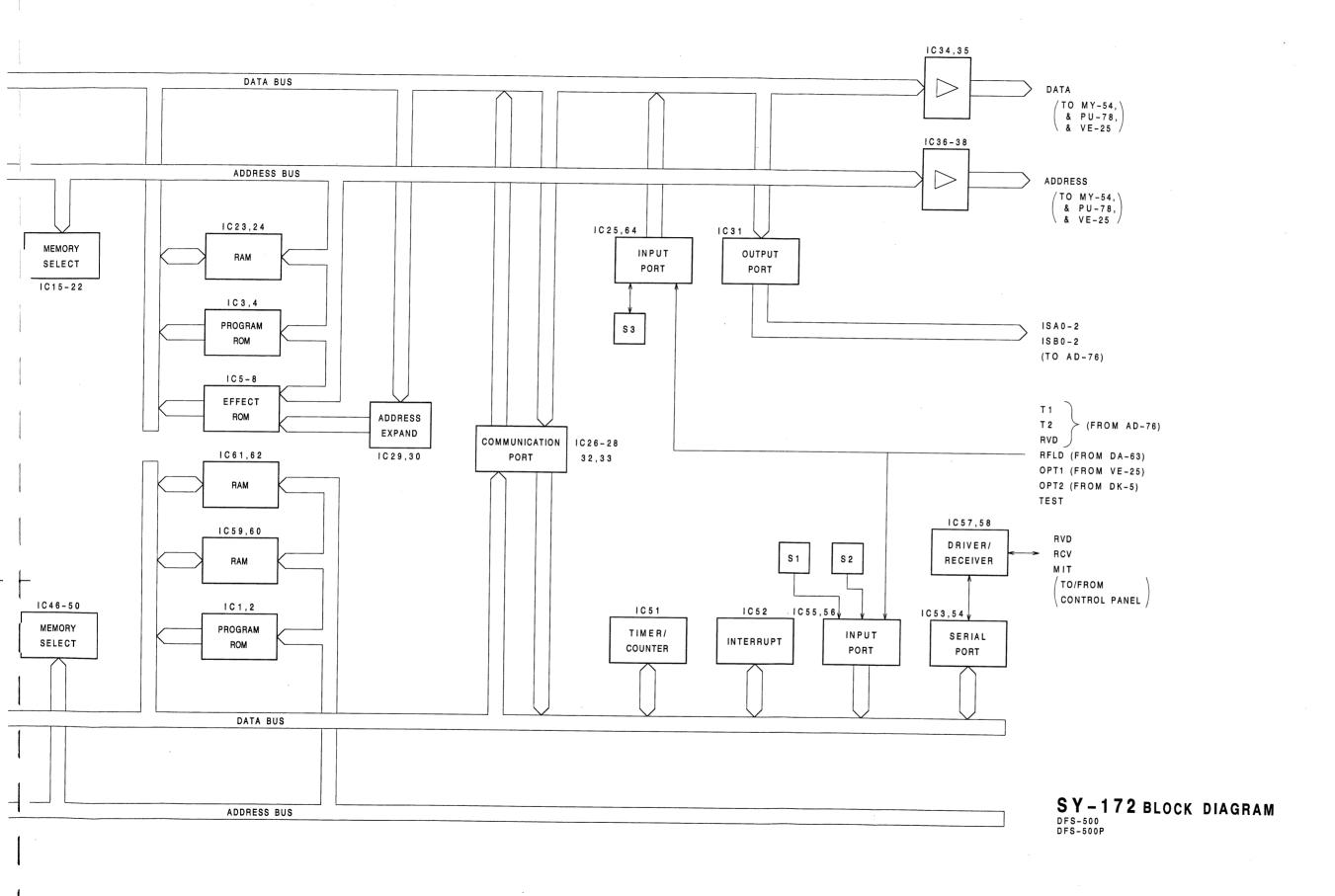
PU-78 BLOCK DIAGRAM DFS-500P



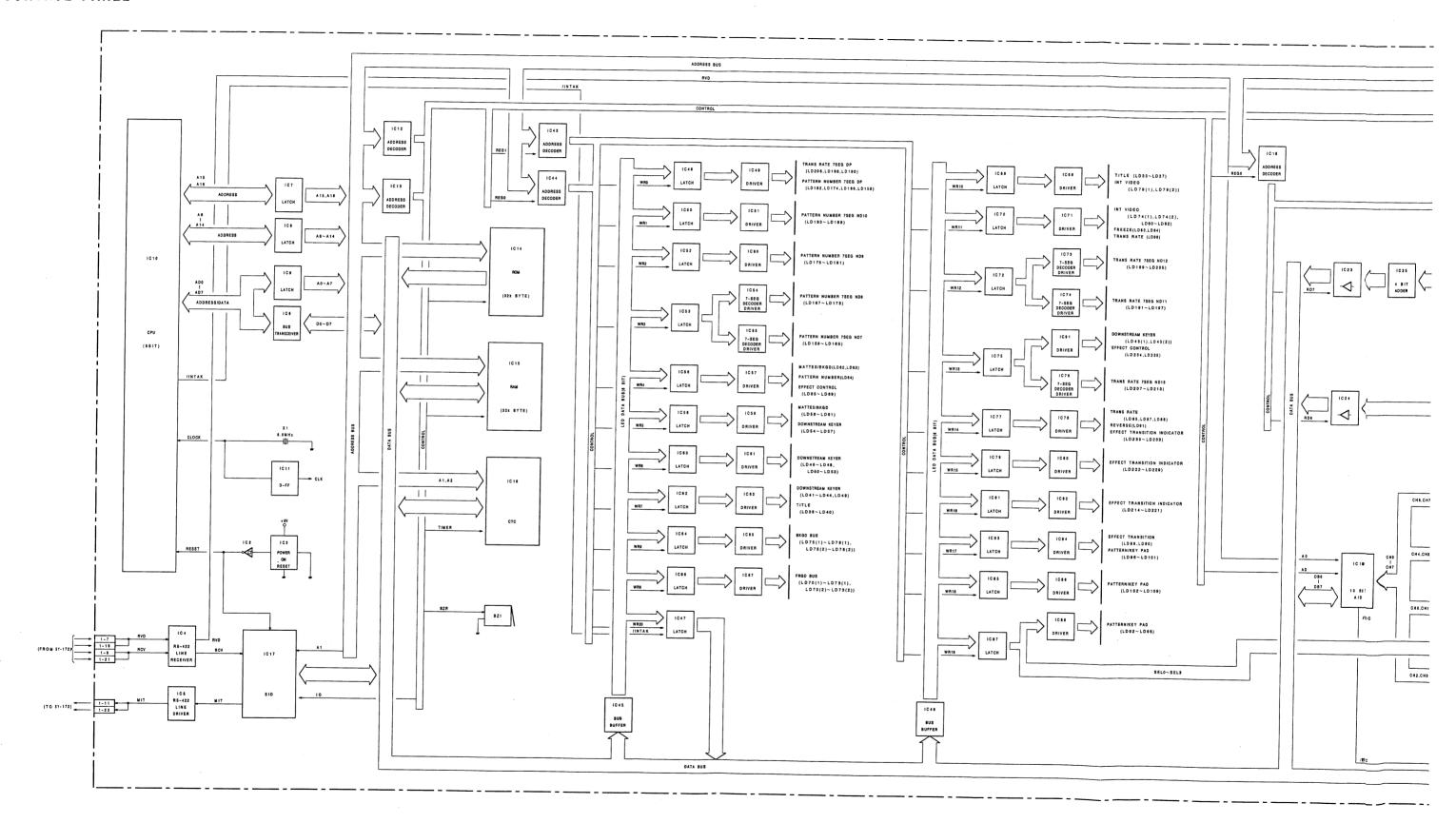


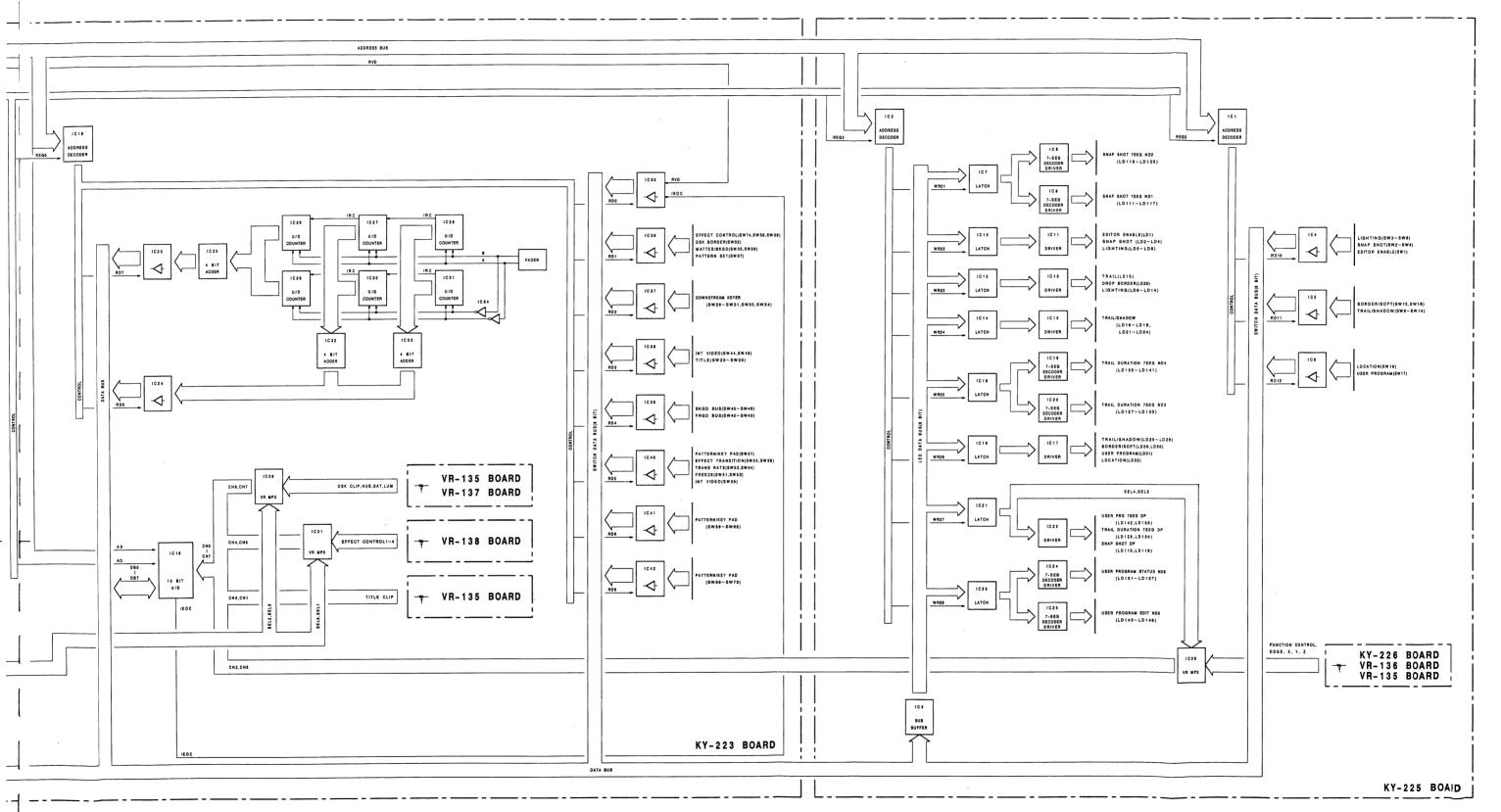
SY-172; System Control





CONTROL PANEL





CONTROL PANEL BLOCK DIAGRAM
DFS-500P

SECTION 5 SCHEMATIC DIAGRAMS

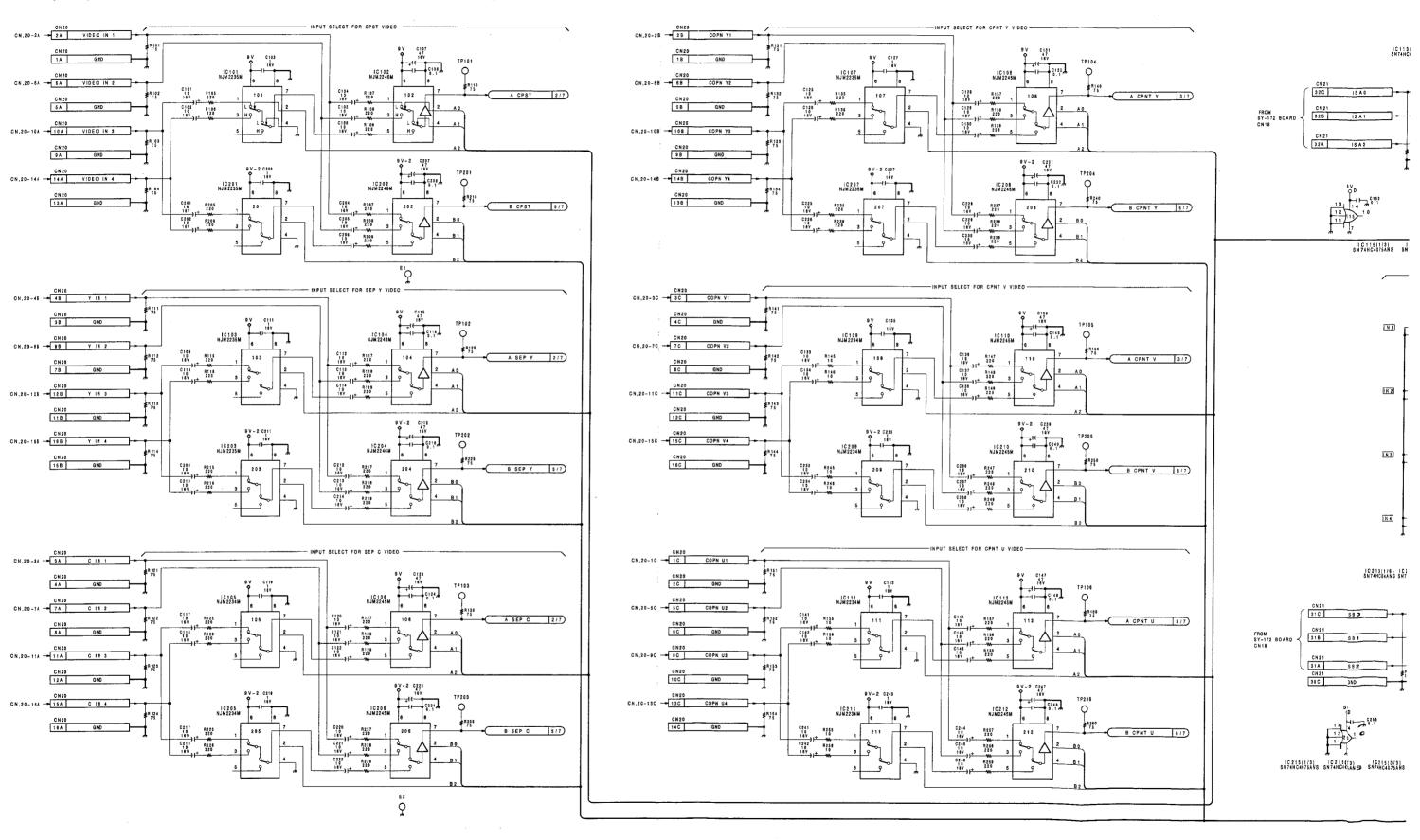
Board		Function	Page
AD-76(1/7)	Input Crosspoint, Title Key Process, Voltage REG	5 - 3
AD-76(2	2 / 7)	A Y/C Separator & Clock Generator	
AD-76(3	3 / 7)	A Chroma Decoder & A/D Converter	
AD-76(4	4 / 7)	A Write Clock Generator	
AD-76(5	5 / 7)	B Y/C Separator & Clock Generator	
AD-76(6	6 / 7)	B Chroma Decoder & A/D Converter ·····	
AD-76(7	7 / 7)	B Write Clock Generator ·····	5 – 1 5
FM-29(1 / 6)	A Frame Memory & Write Controller	
FM-29(2/6)	B Frame Memory & Write Controller	
FM-29(3 / 6)	Control Register, Memory Read Controller	
FM-29(4	4 / 6)	Internal Video Signal Generator	
FM-29(5 / 6)	BKGD Bus Field Delay Memory ·····	
FM-29(6 / 6)	FRGD Bus Digital Lowpass Filter	5 – 2 7
M Y - 54(1/3)	Control Register, Address Counter, Title Key Process	
M Y - 54(2 / 3)	Video Effect Memory ·····	
M Y - 54(3 / 3)	Matrix Memory, Interpolater	5 - 3 3
PU-78(1/3)	Control Register, Front-End Address Calculator	
PU-78(2	2 / 3)	Look Up Table Memory ·····	5 - 3 7
PU-78(3/3)	Back-End Address Calculator	5 - 3 9
DA-63(1 /5)	SYNC Generator	
DA-63(2	2 / 5)	Digital M/E & D/A Converter	
DA-63(3 / 5)	PGM Out (Composite, S) Processor & B.B Generator	
DA-63(4	4 / 5)	PGM Out (Component) & Key Out PRO ······	
DA-63(5 / 5)	Address & Data Bus Driver·····	5 – 4 9
SY-172	(1/2)	Effect CPU ····	5 – 5 1
SY-172	(2/2)	Main CPU	5 - 5 3
CN-573		Connector Board ·····	5 - 5 5
MB-385		Mother Board ·····	5 - 5 7
K Y - 223	(1/3)	CPU	
KY-223	(2/3)	LED Driver	
KY-223	(3/3)	LED & Switch ·····	5 - 63
K Y - 2 2 5	(1/2)	LED Driver	
KY-225	(2/2)	LED & Switch	5 - 67
FRAME	WIRING (1/3)	Process Unit····	
FRAME	W R N G (2/3)	Process Unit	
FRAME	W IR IN G (3/3)	Control Panel·····	5 - 73

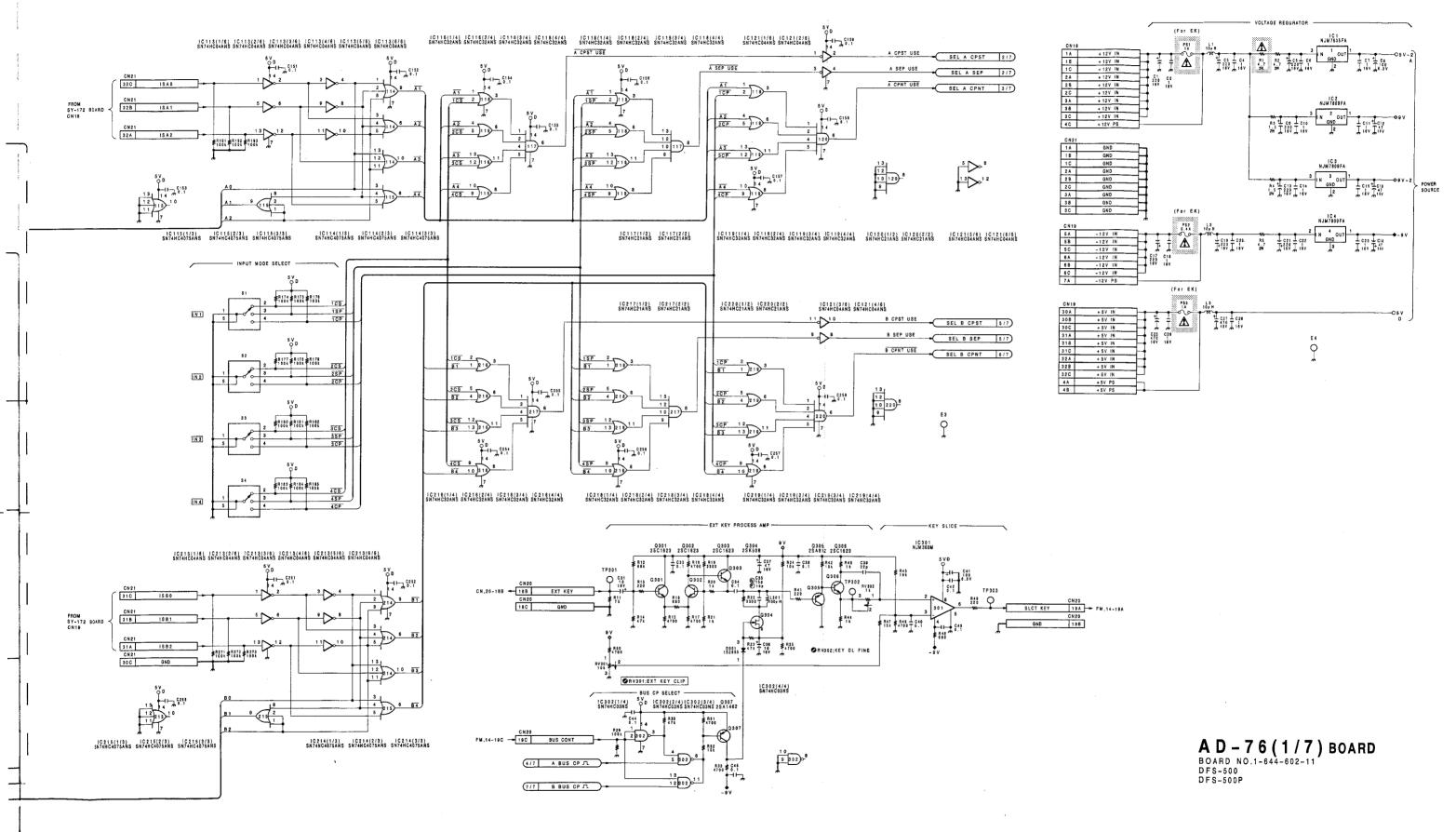
注意1;▲ 印のついた部品は安全性を維持するために重要な部品です。 従って交換する時は必ず指定の部品を使って下さい。

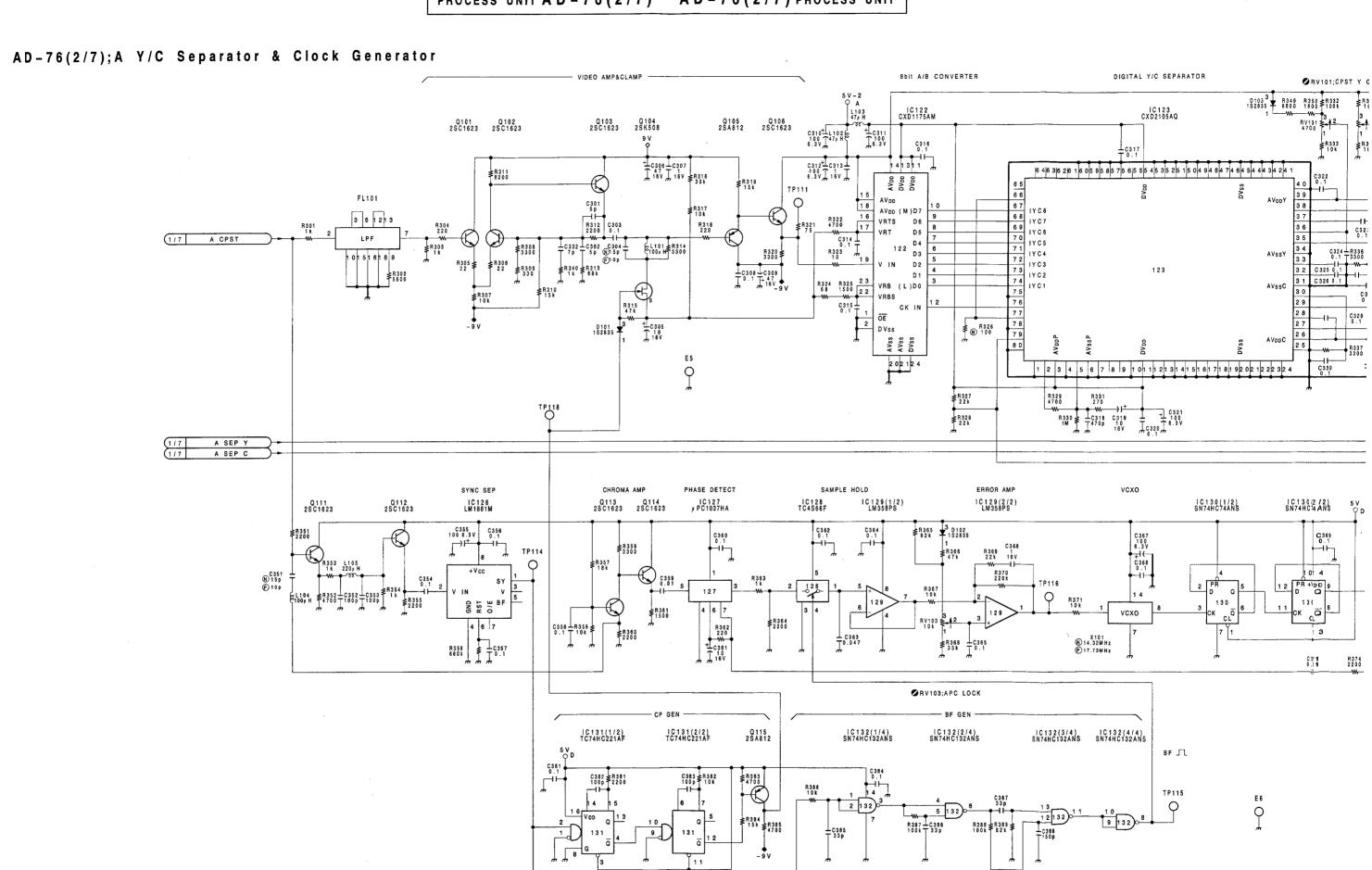
NOTE:

The ${ \ifrule { \ifrule A} \end{foreign} }$ -marked components are critical to sefety. Replace only with same components as specified.

AD-76(1/7); Input Crosspoint, Title Key Process, Voltage REG.

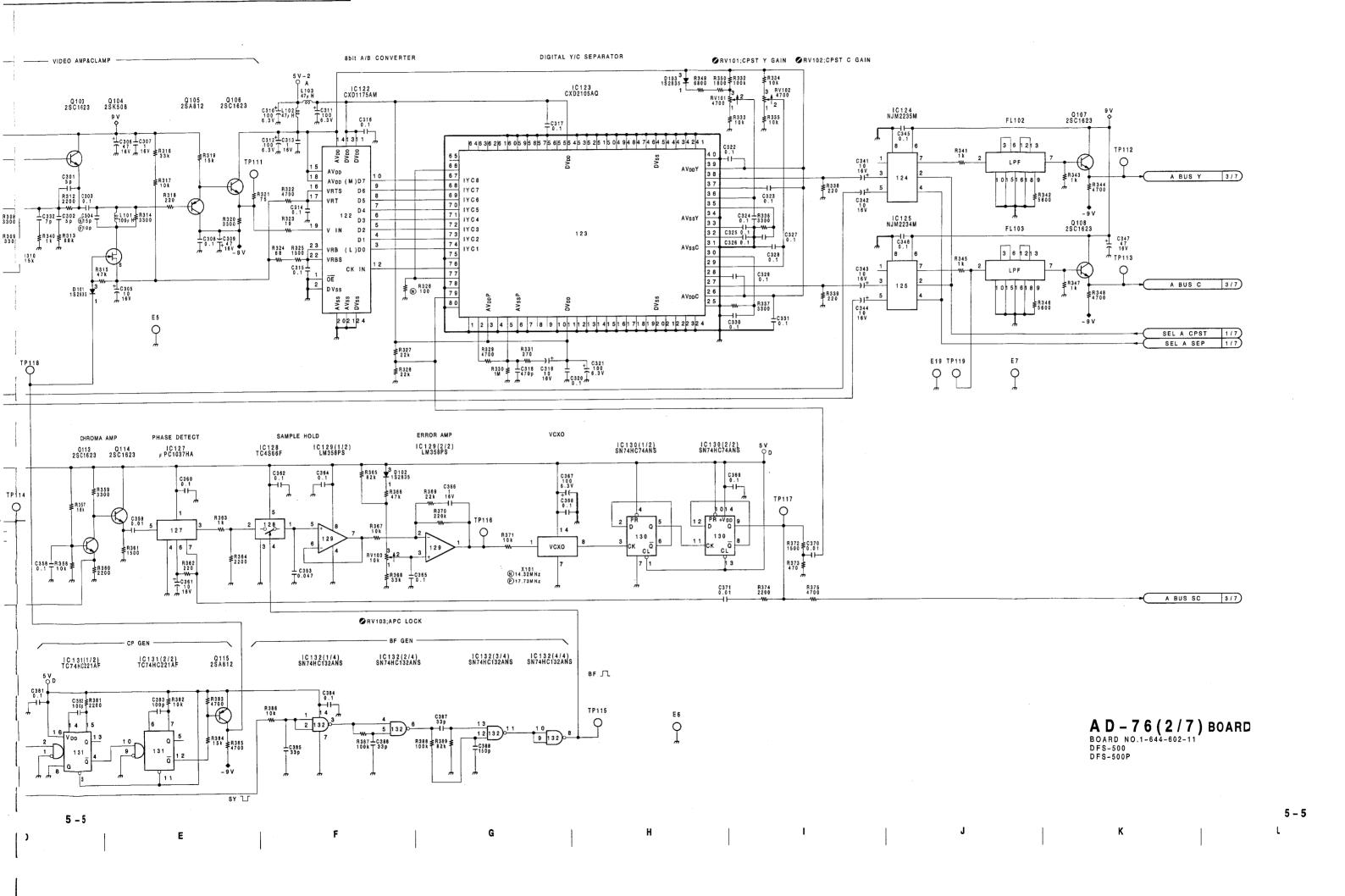


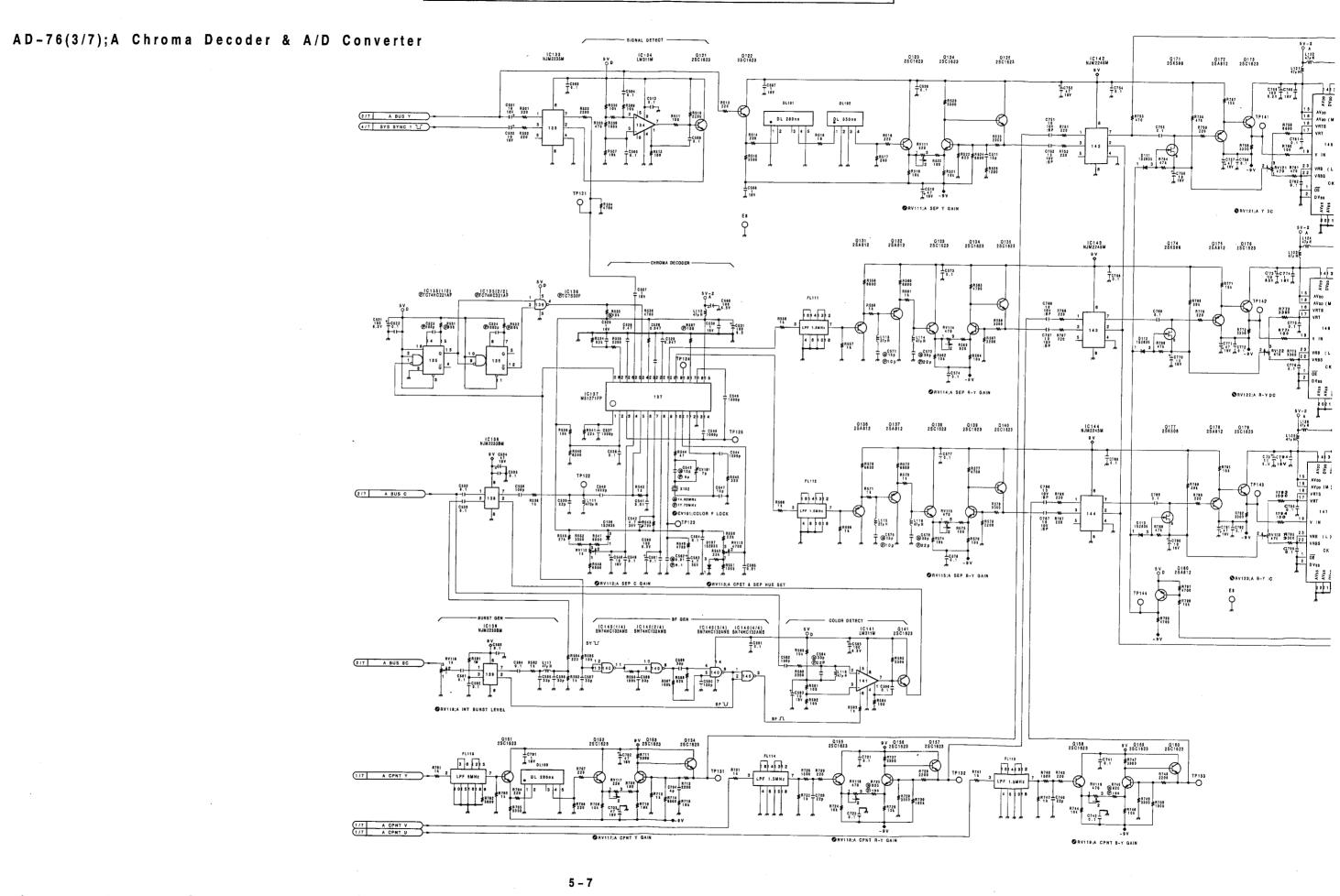




5 – 5

SY ∐





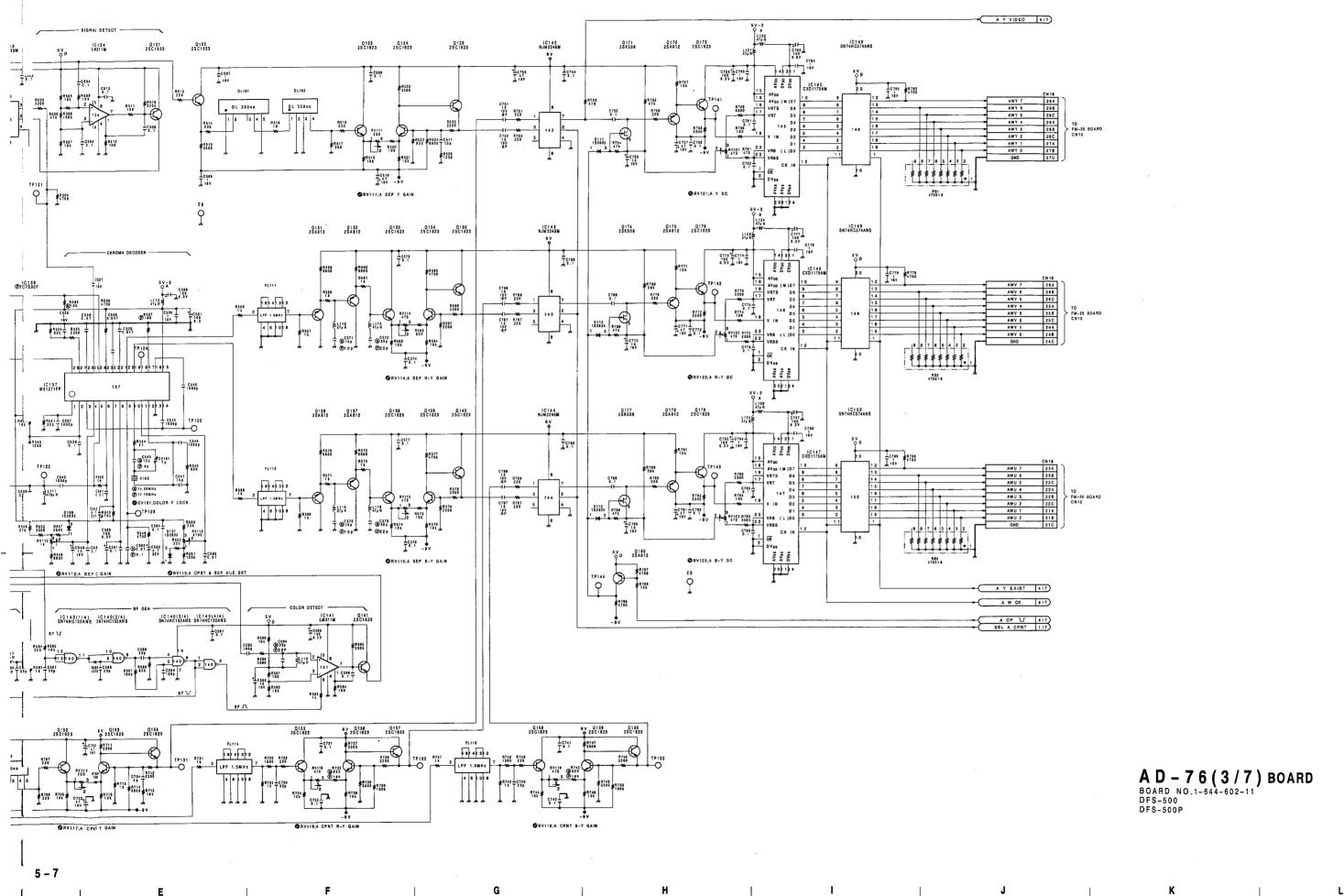
ט

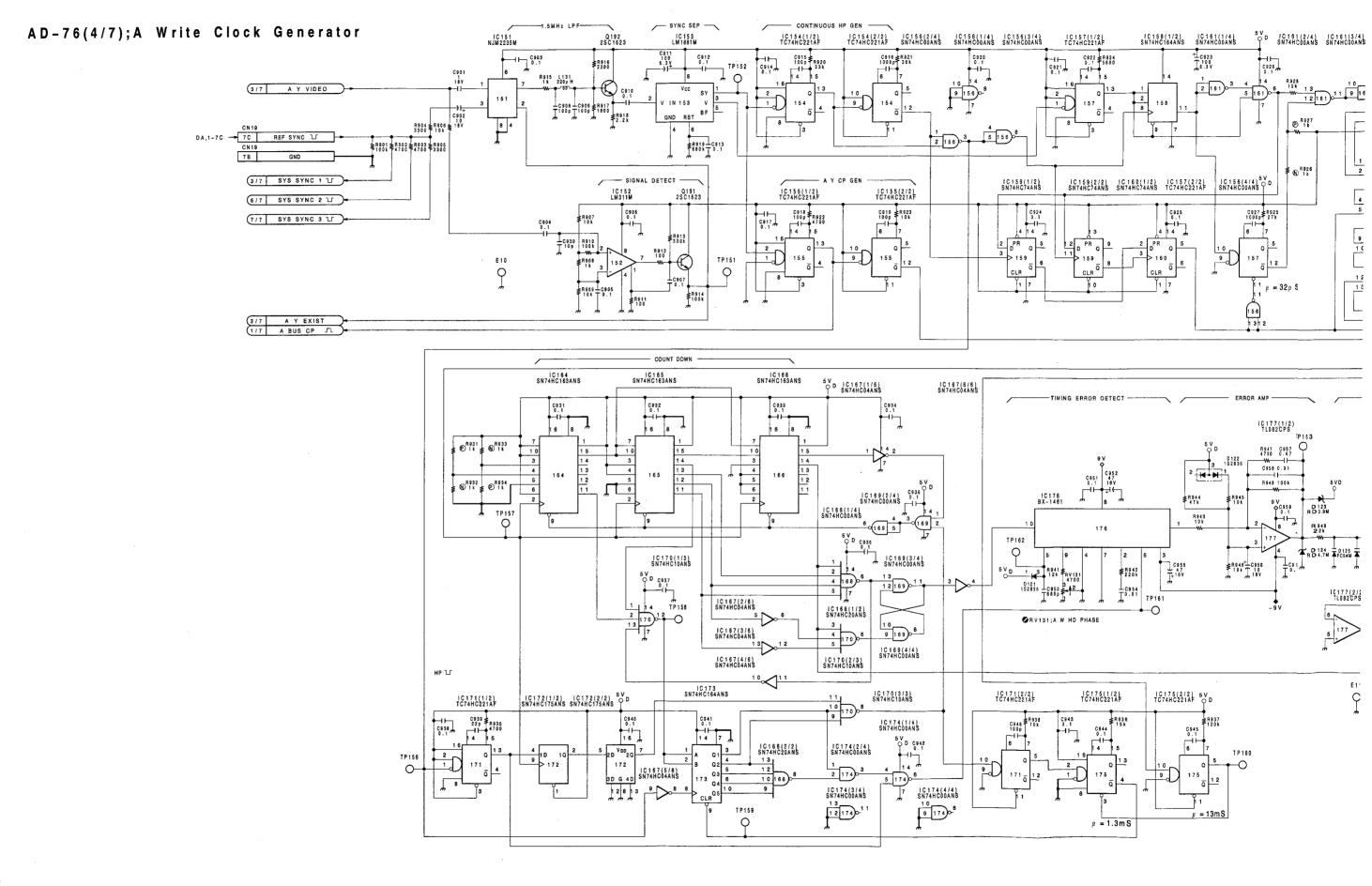
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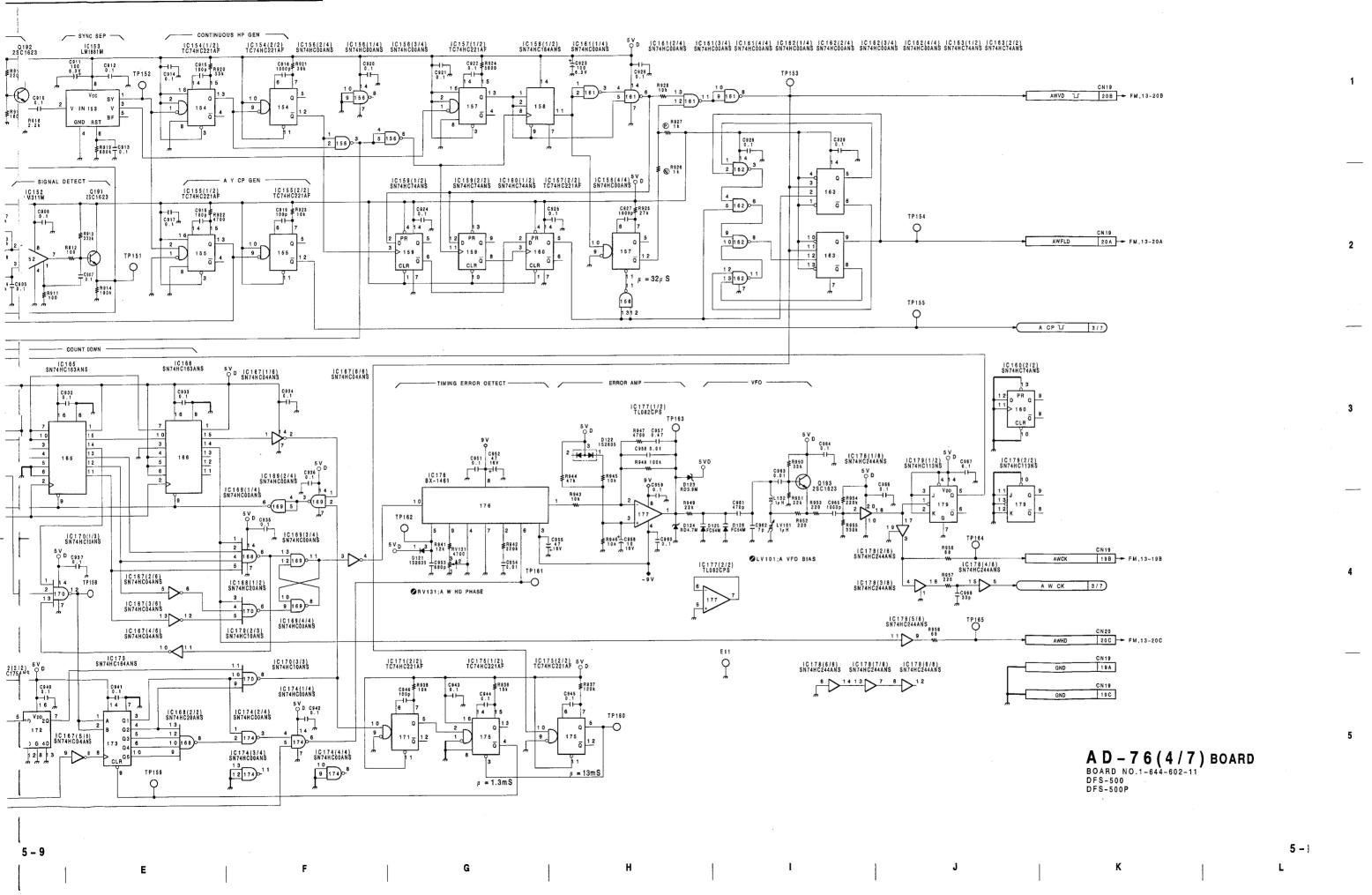
5 – 9

С

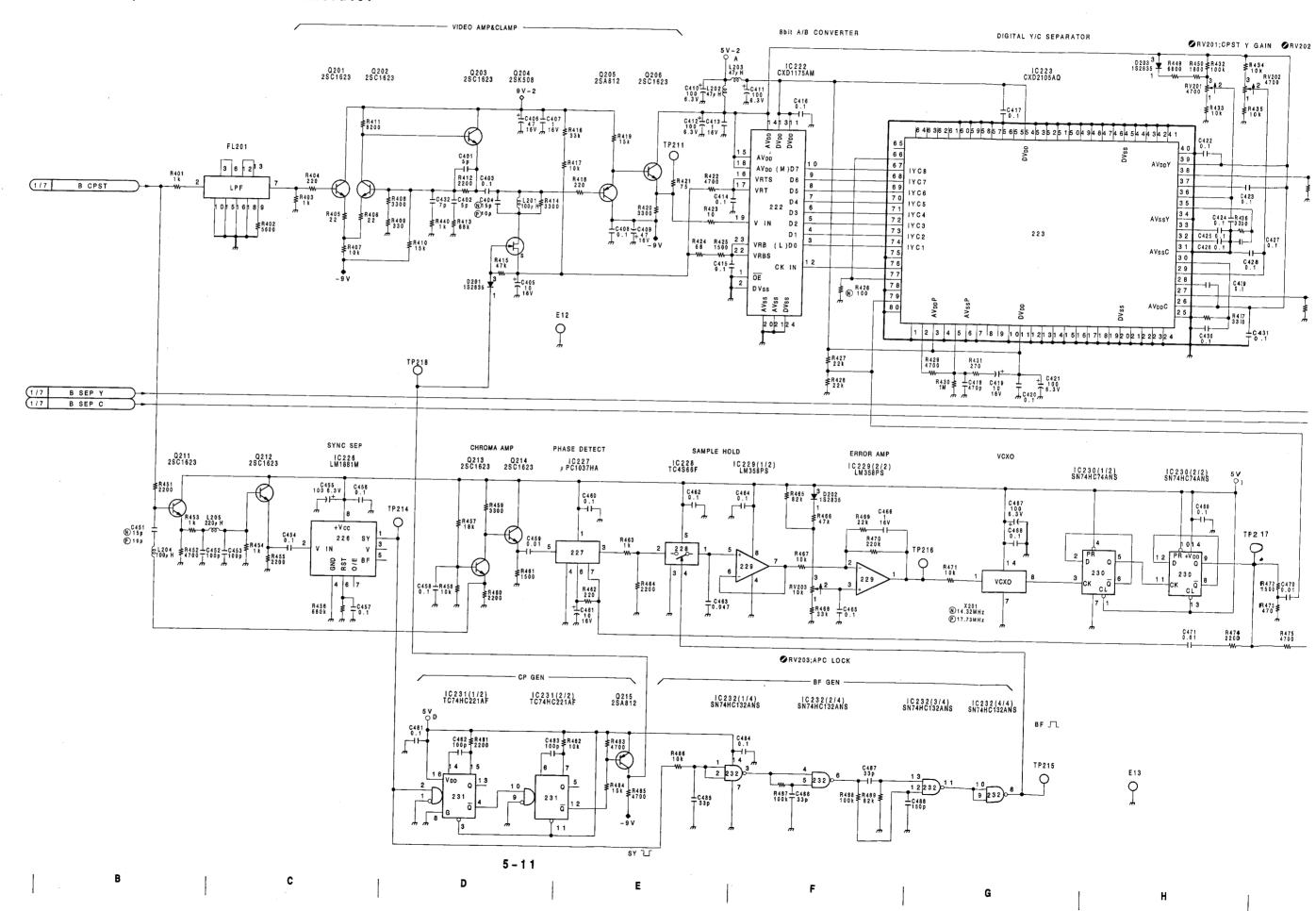
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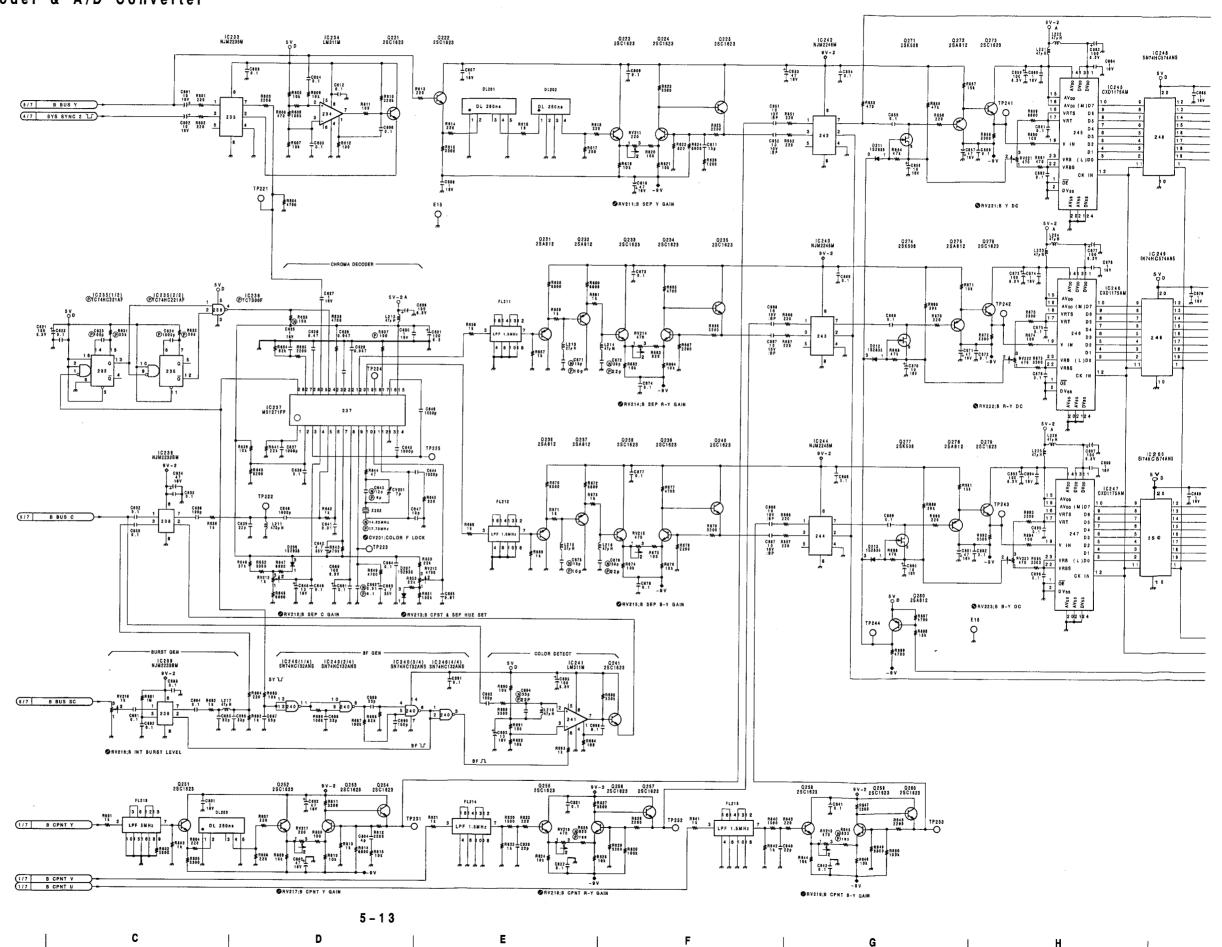


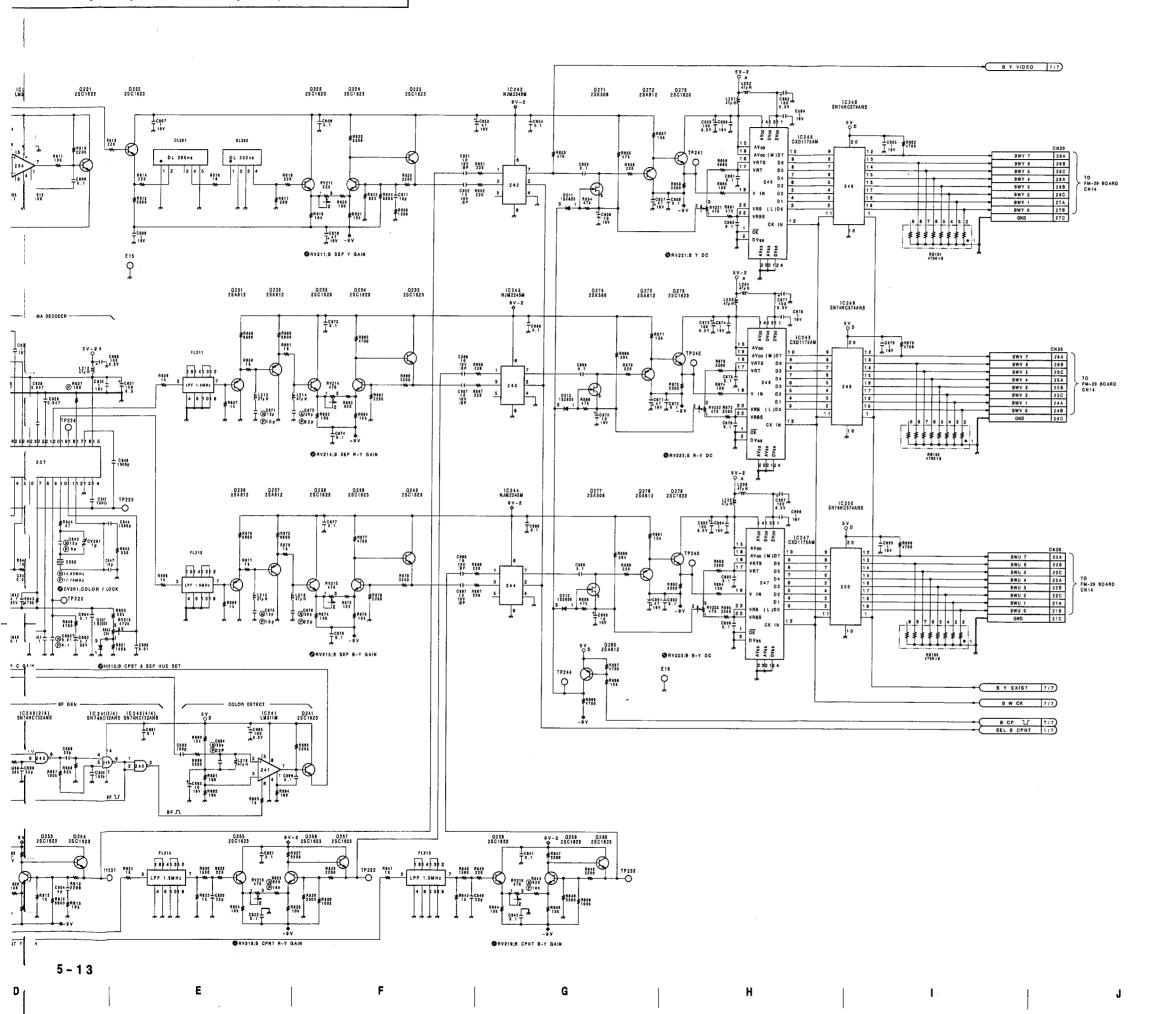
AD-76(5/7); B Y/C Separator & Clock Generator



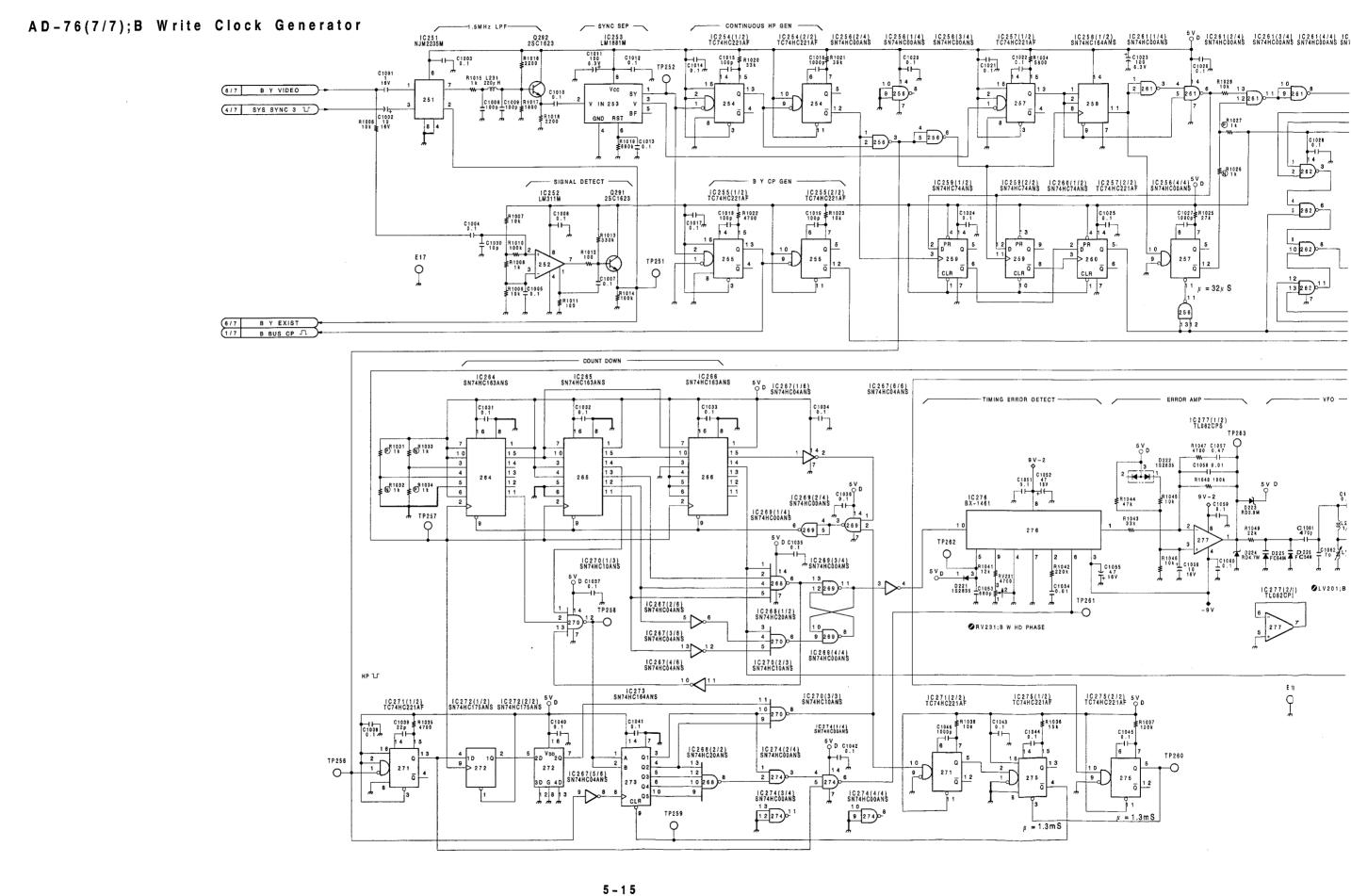
) $_{T}$ 76(5/7) A D - 76(5/7) PROCESS UNIT

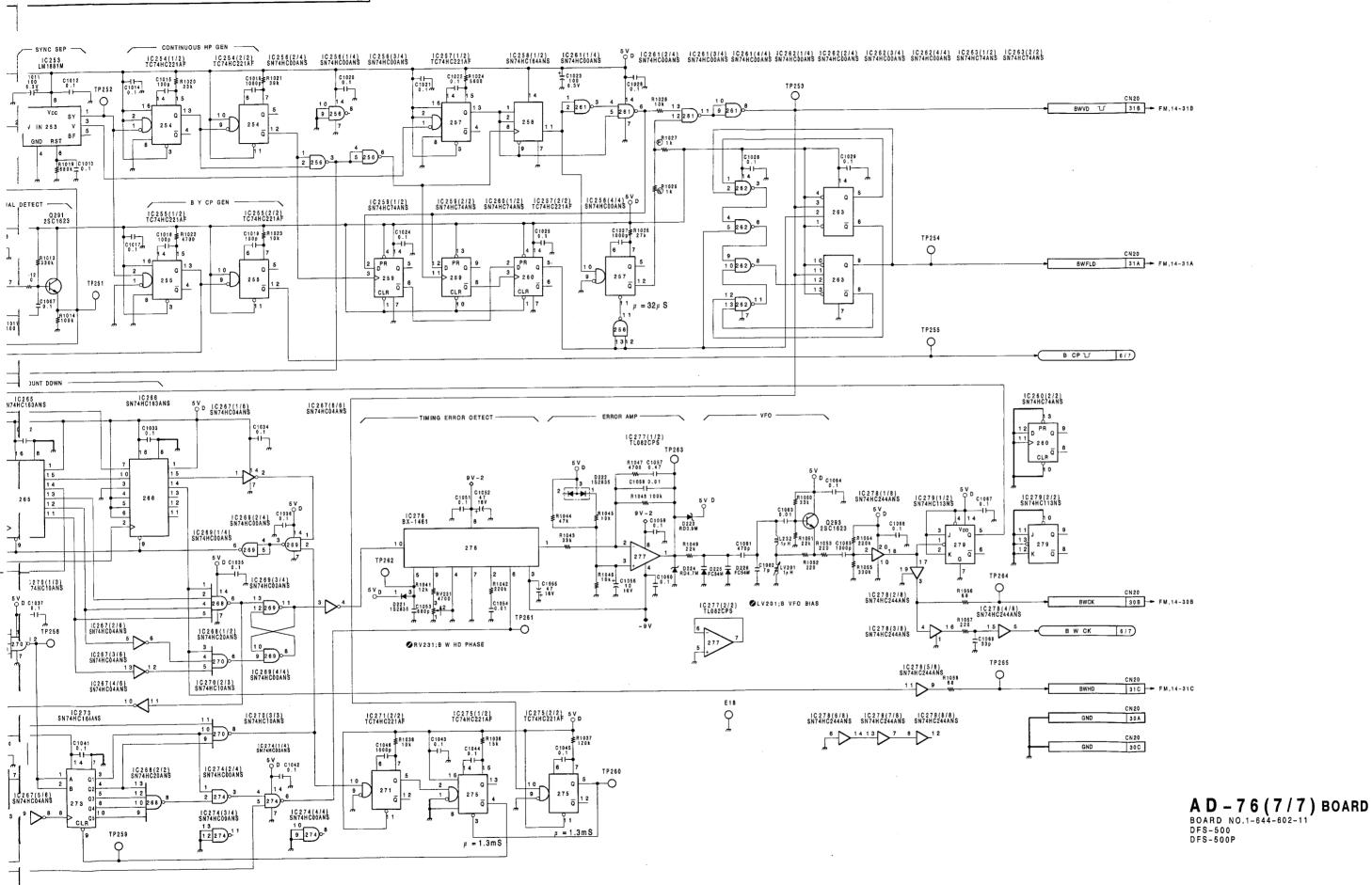
AD-76(6/7); B Chroma Decoder & A/D Converter





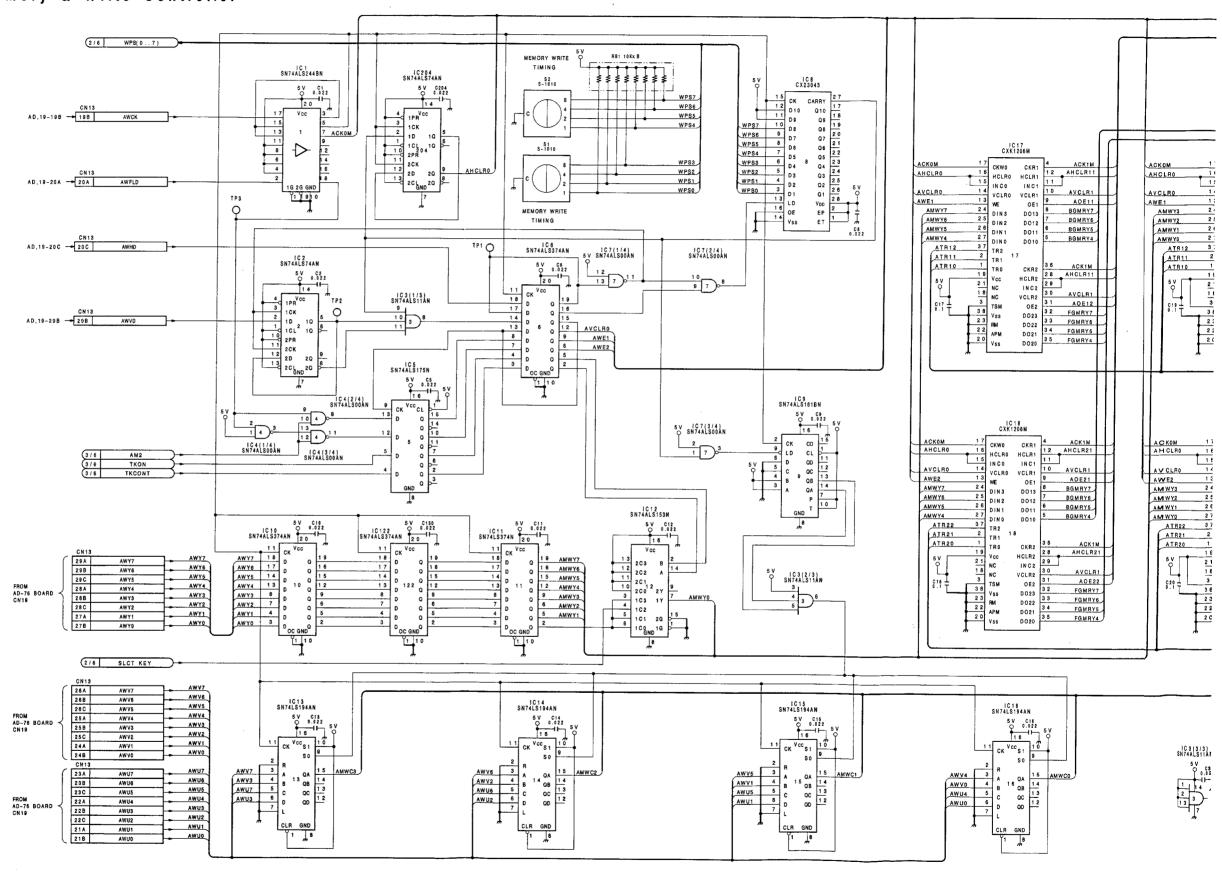
A D - 76 (6/7) BOARD
BOARD NO.1-644-602-11
DFS-500
DFS-500P





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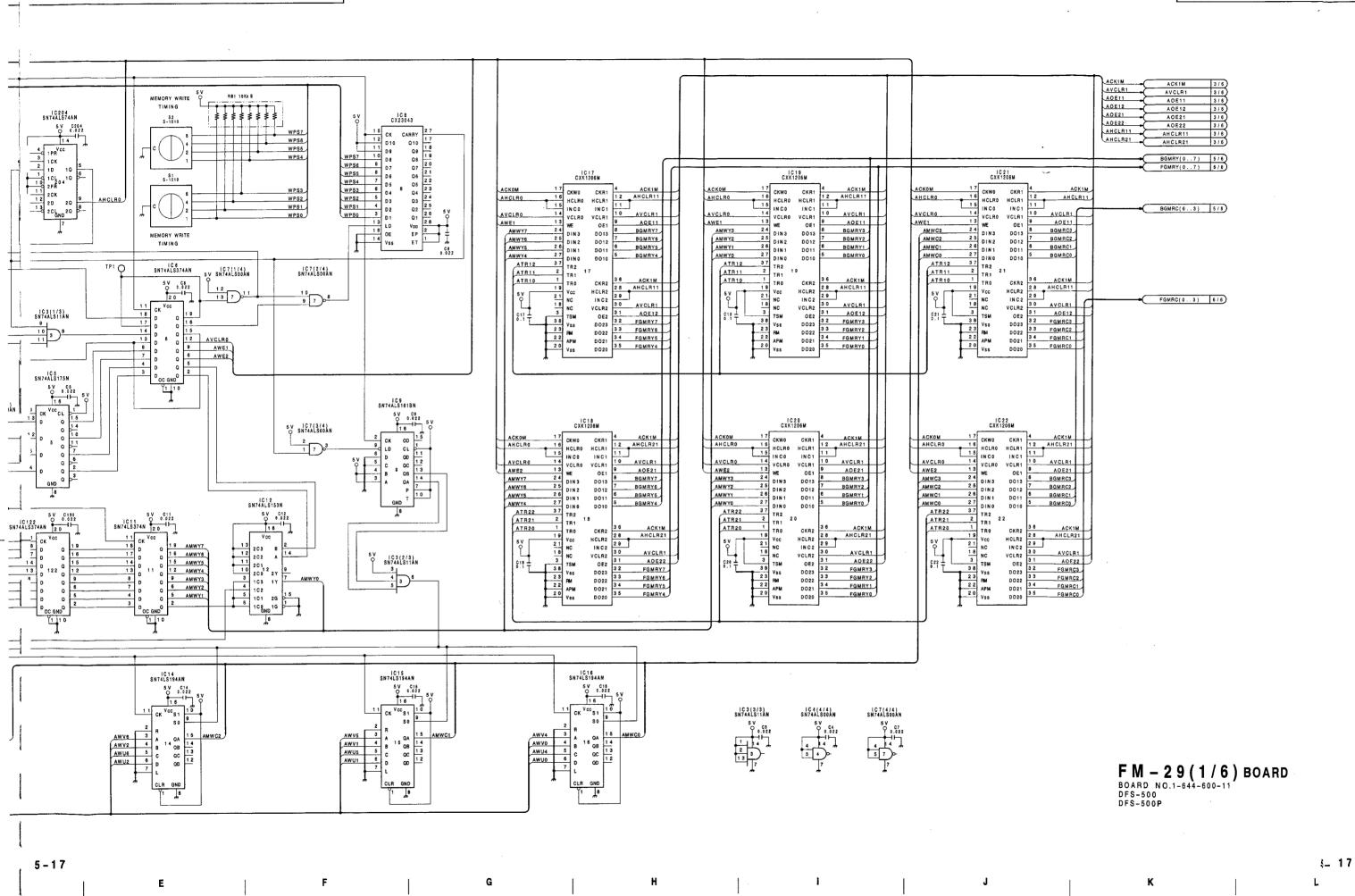
FM-29(1/6); A Frame Memory & Write Controller



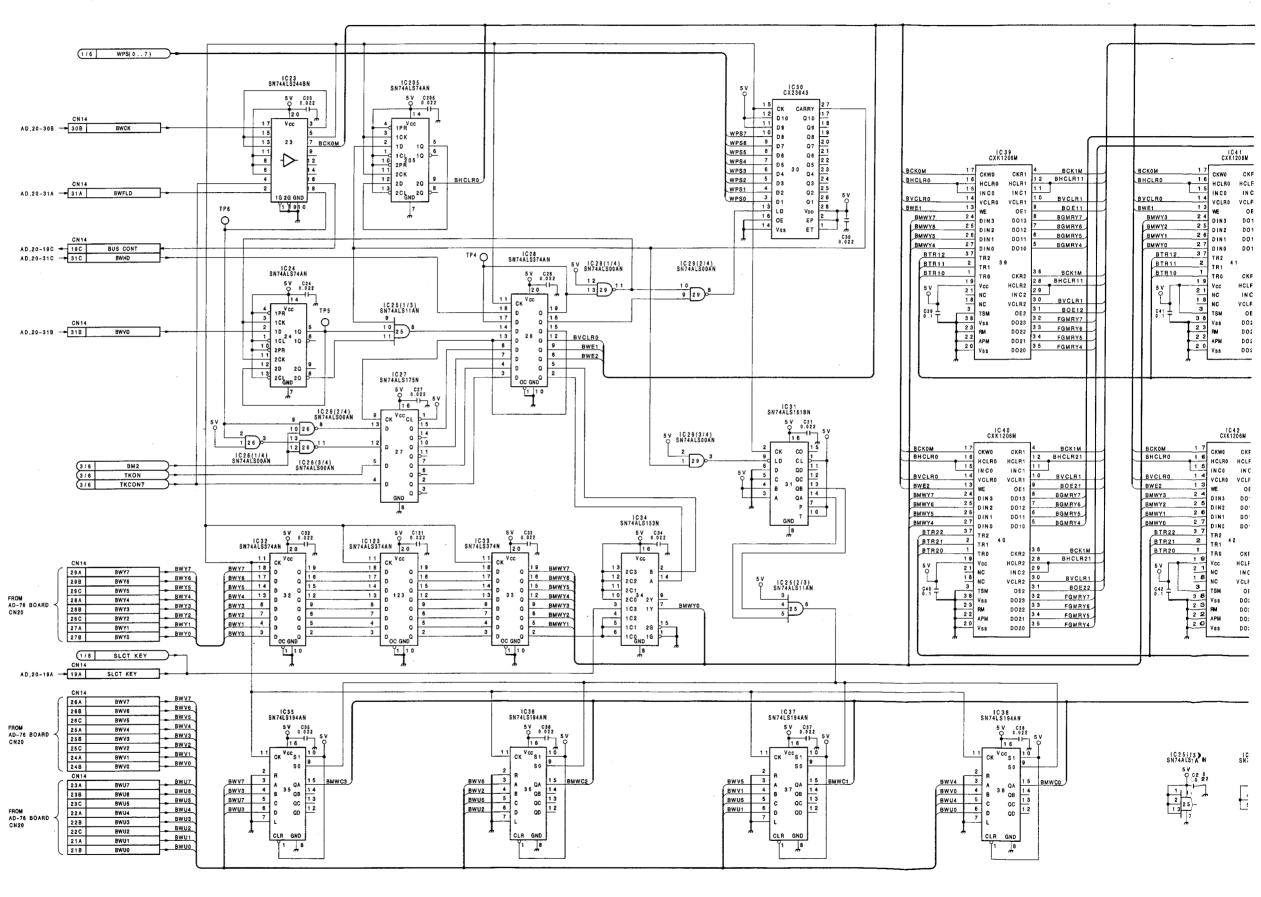
5 – 17

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FM-29(2/6); B Frame Memory & Write Controller



-19

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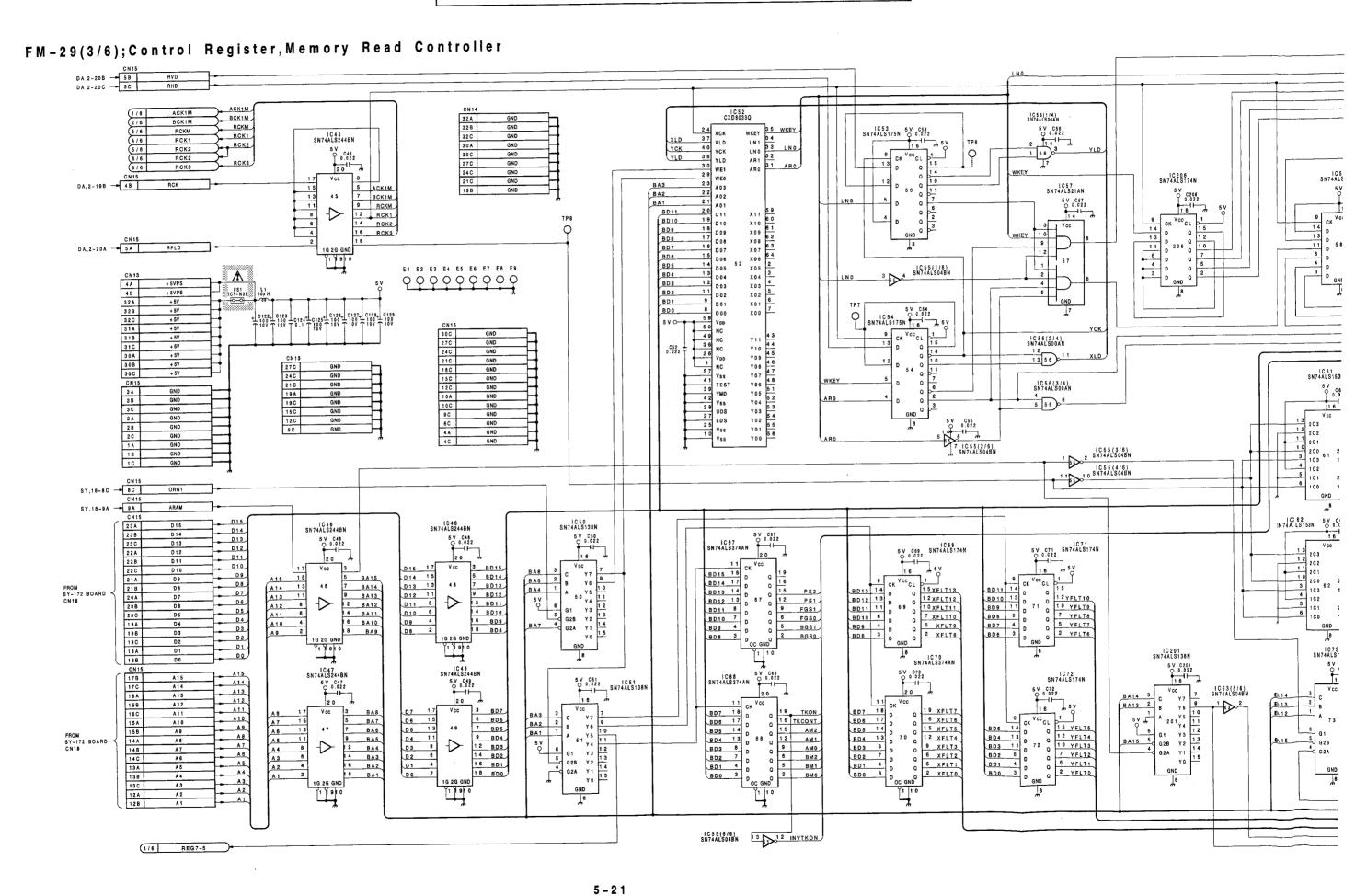
F

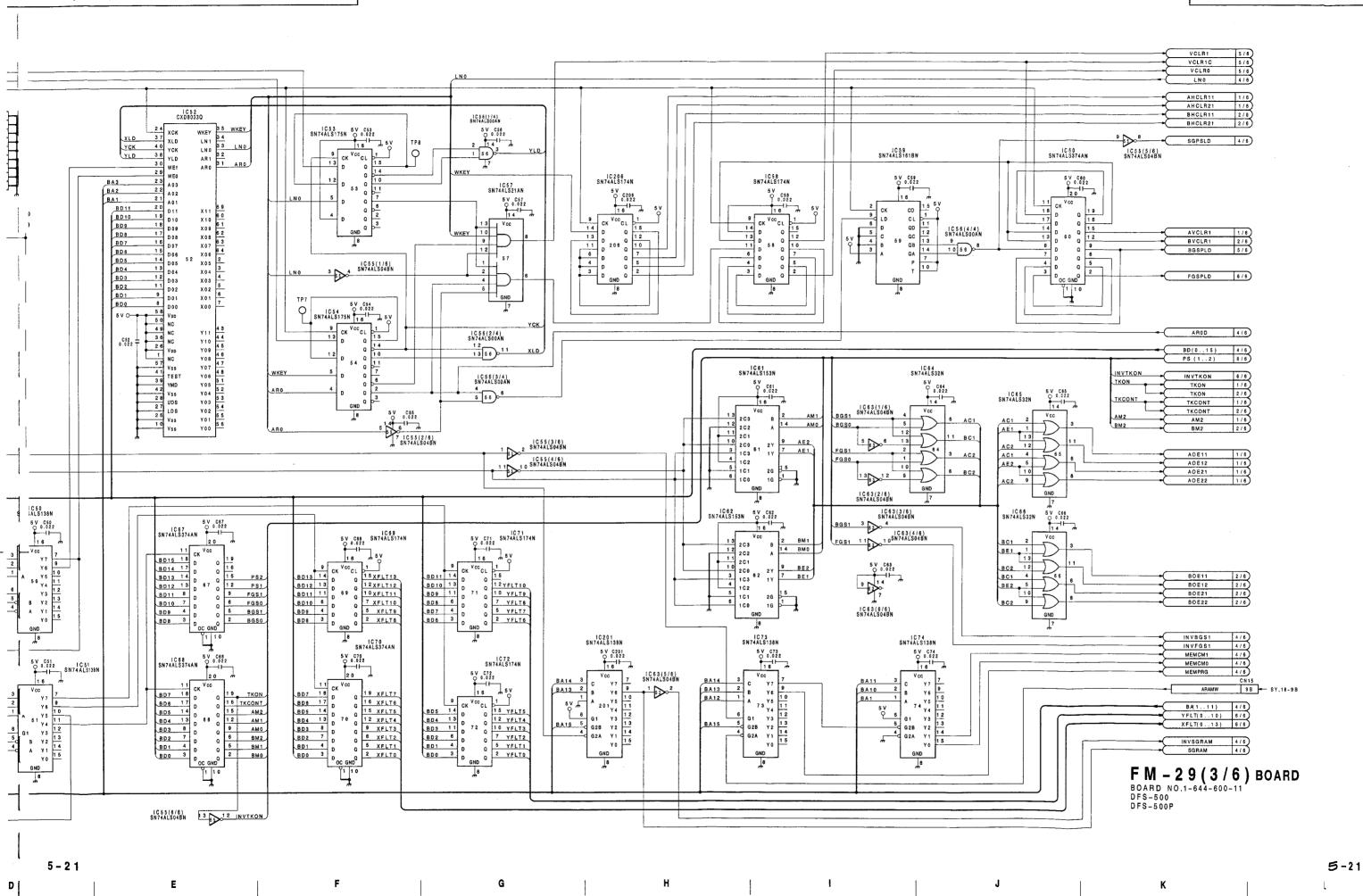
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FM-29(2/6) FM-29(2/6) PROCESS UNIT

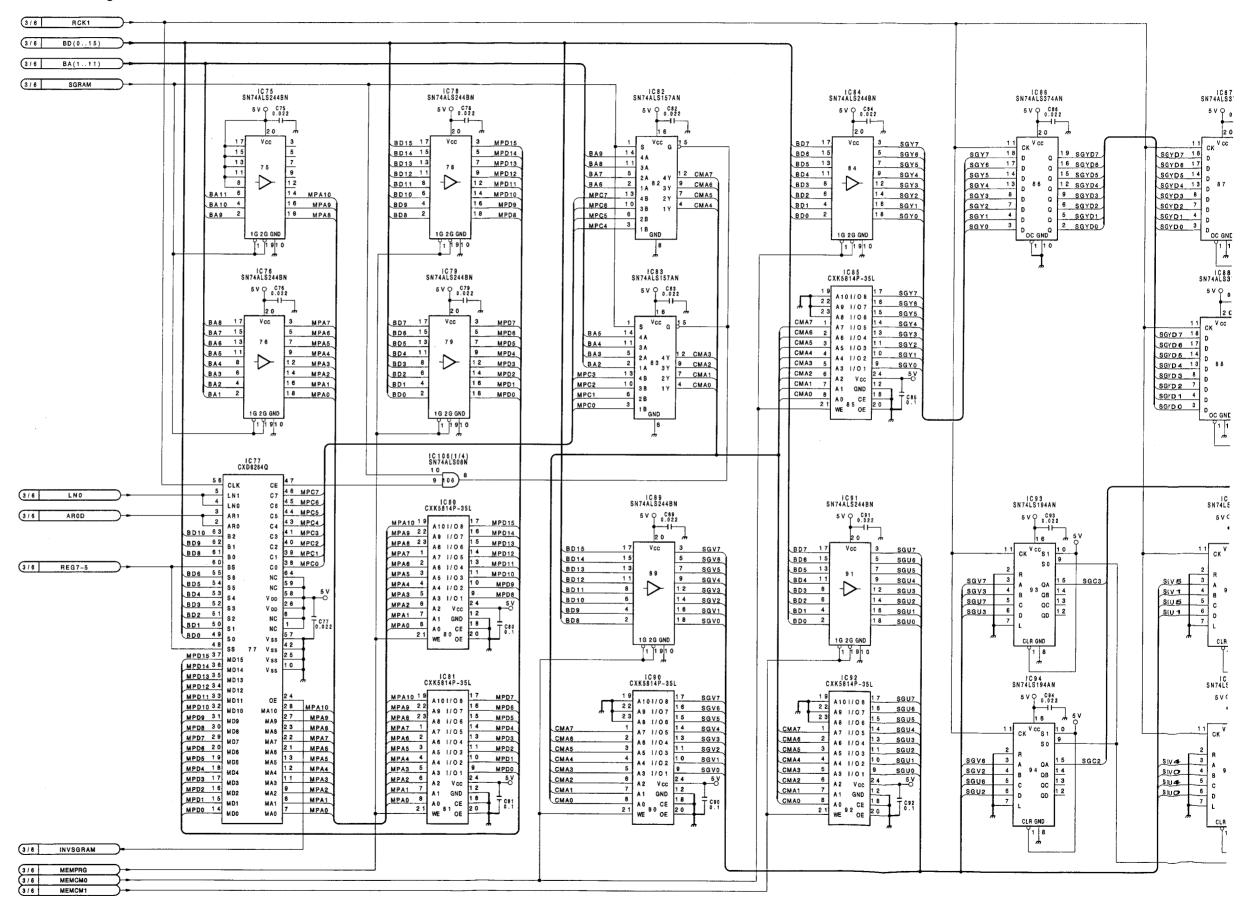




FM-29(4/6);Internal Video Signal Generator

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C



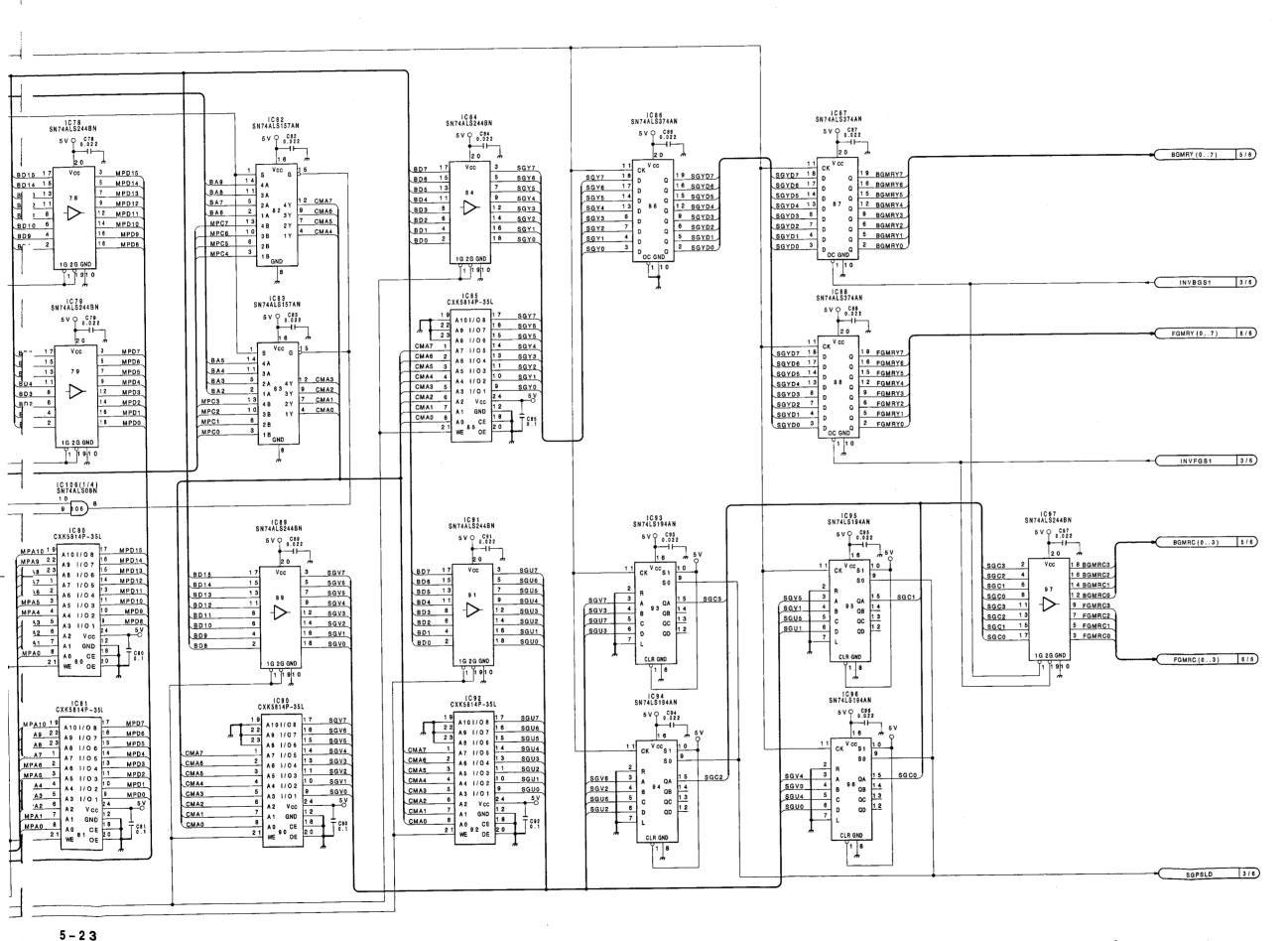
5 - 23

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FM - 29 (4/6) BOAR D
BOARD NO.1-644-600-11
DFS-500
DES-500P

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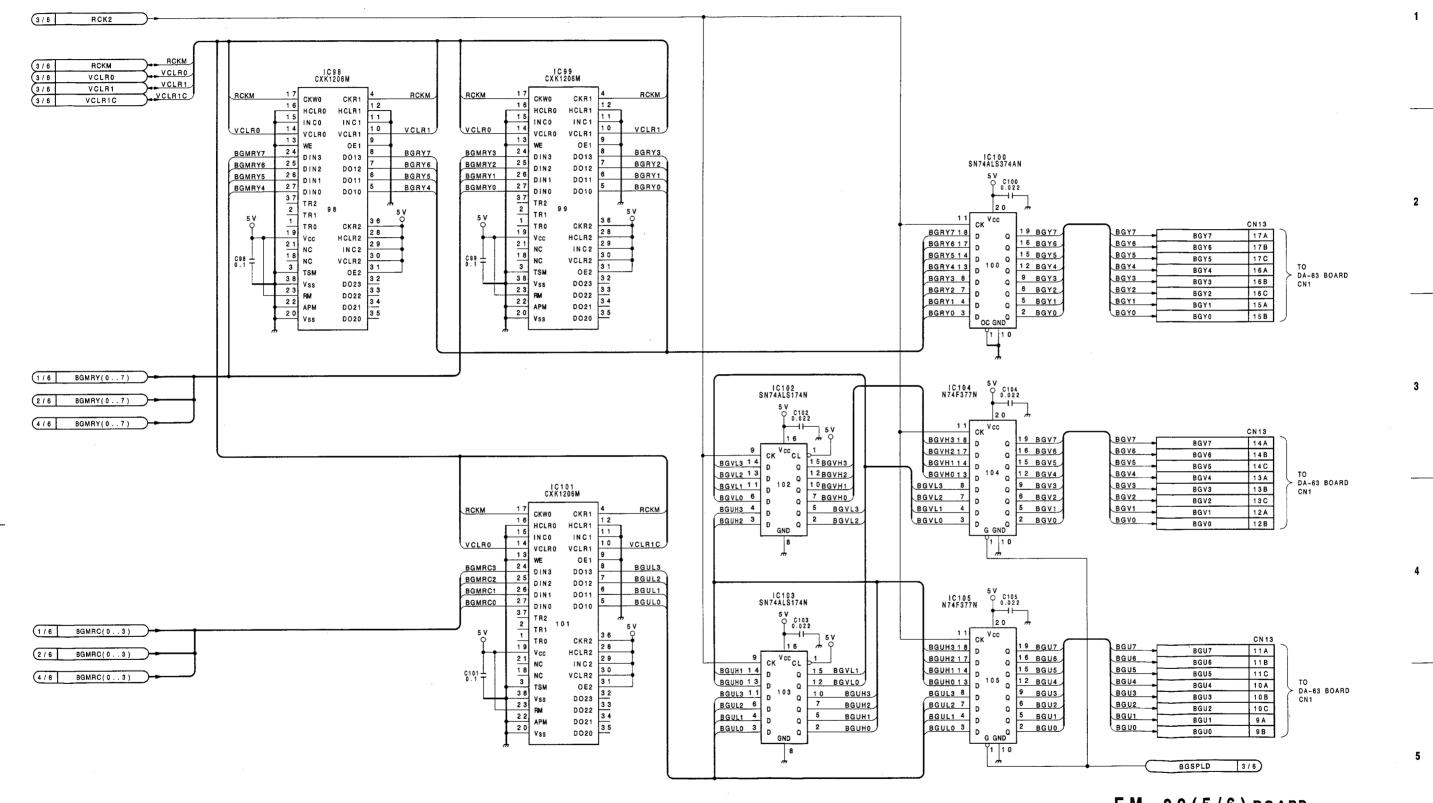
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FM-29(5/6); BKGD Bus Field Delay Memory



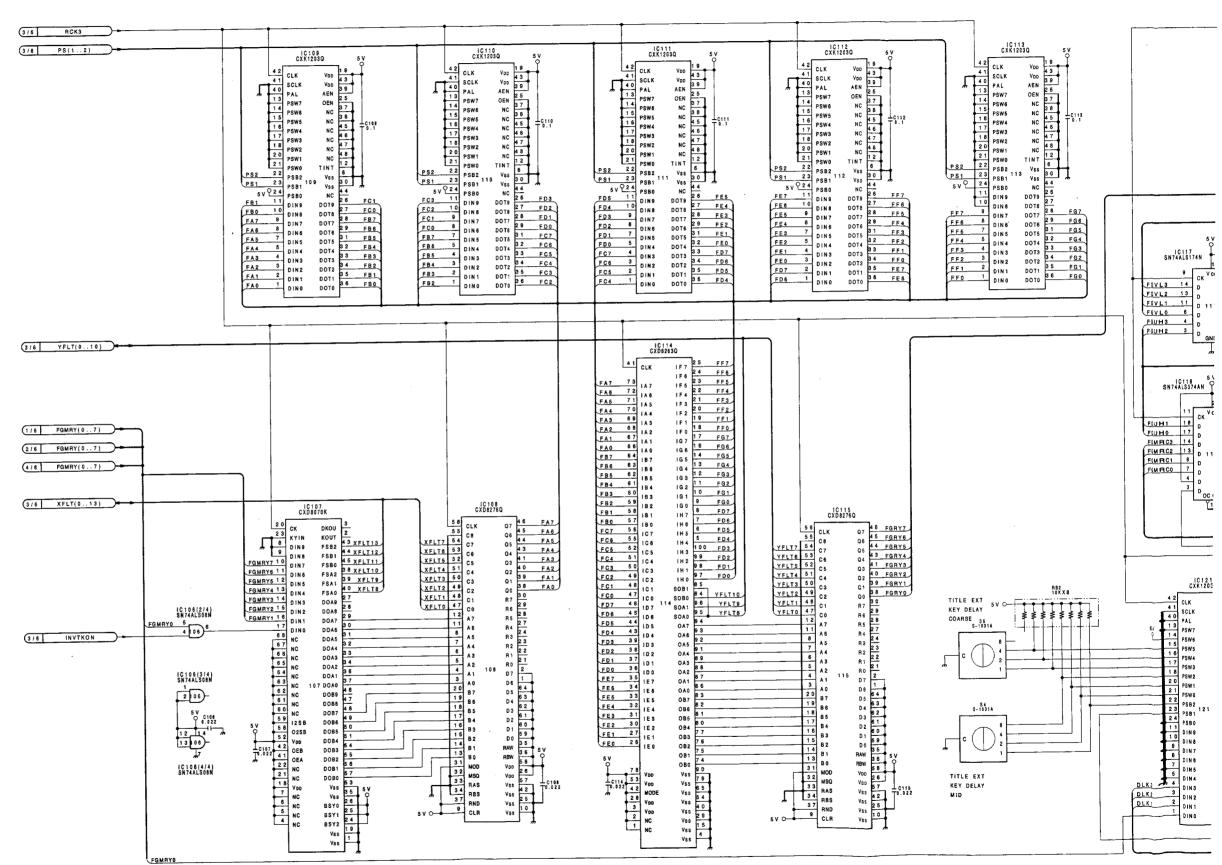
FM-29(5/6) BOARD

DFS-500 DFS-500P

5 – 2 5

5 - 25

FM-29(6/6); FRGD Bus Digital Lowpass Filter



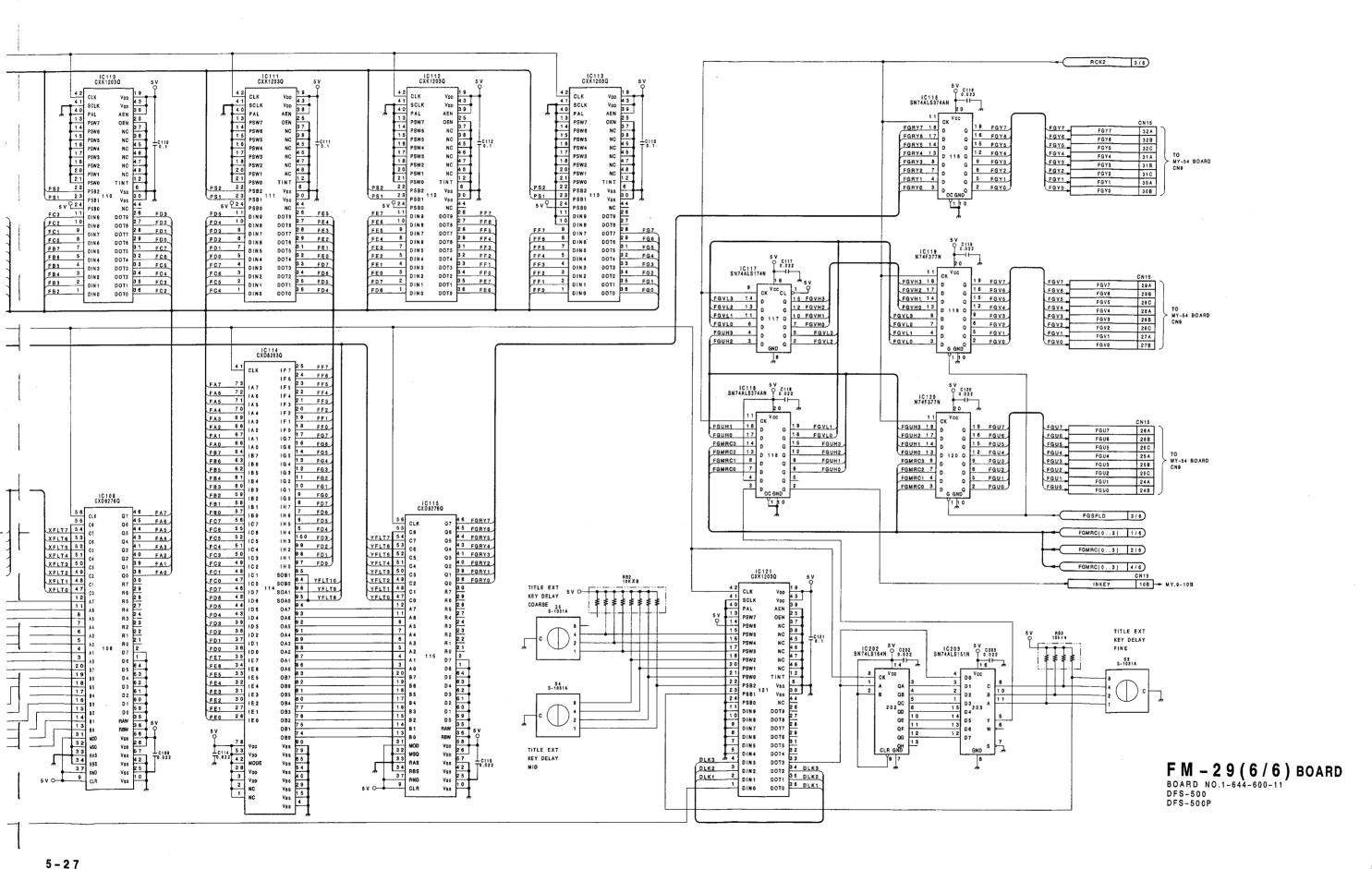
5 – 27

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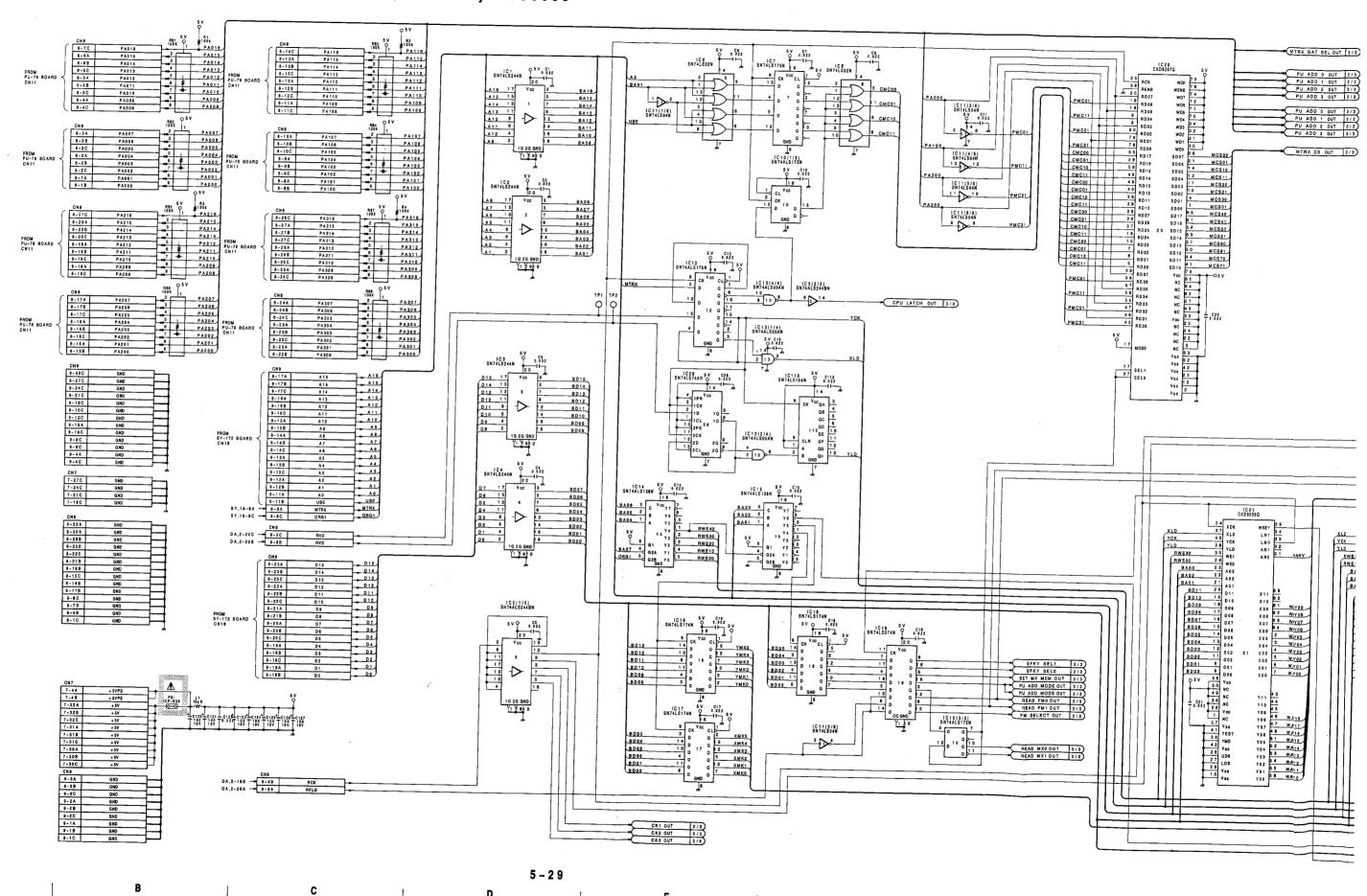
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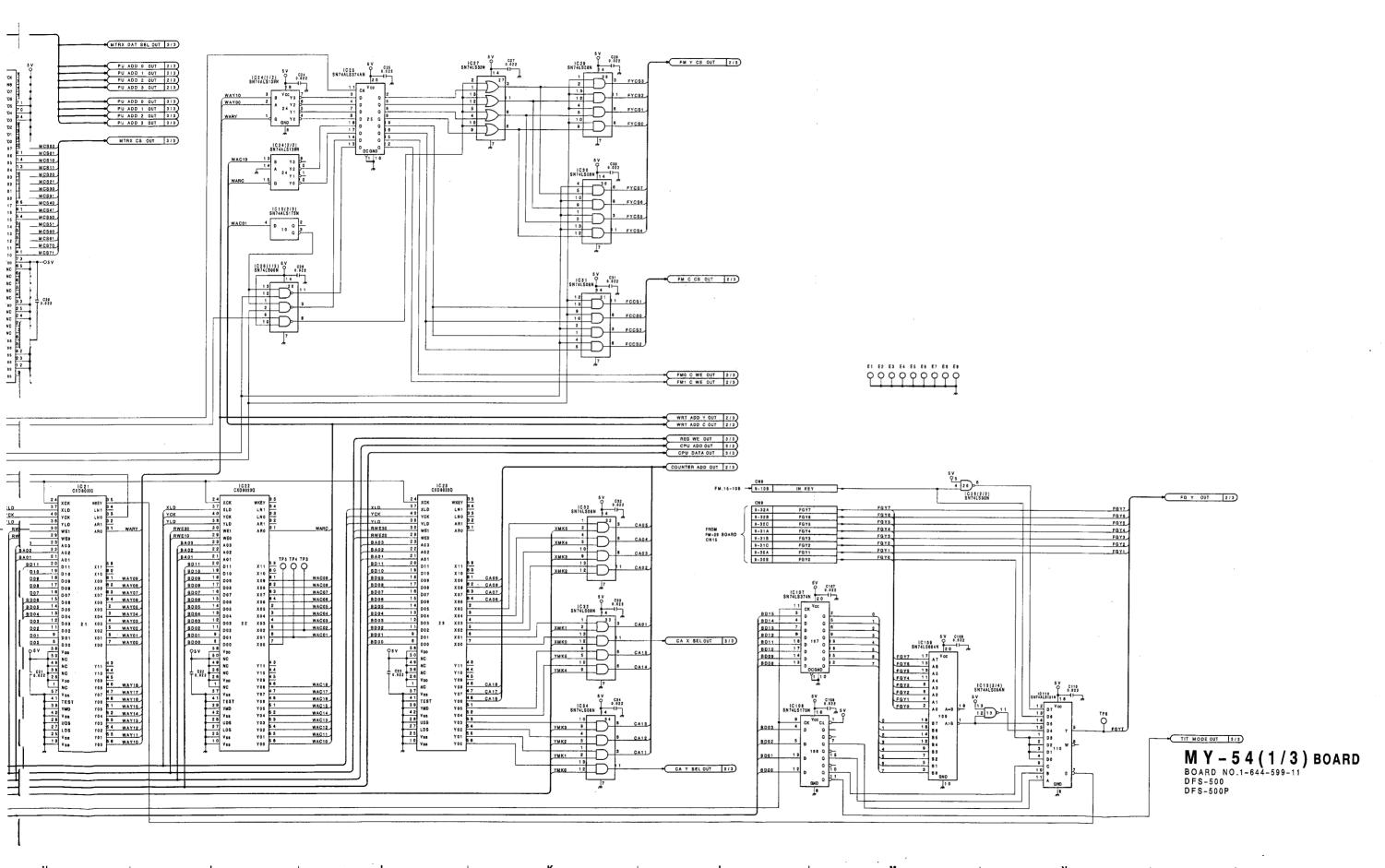
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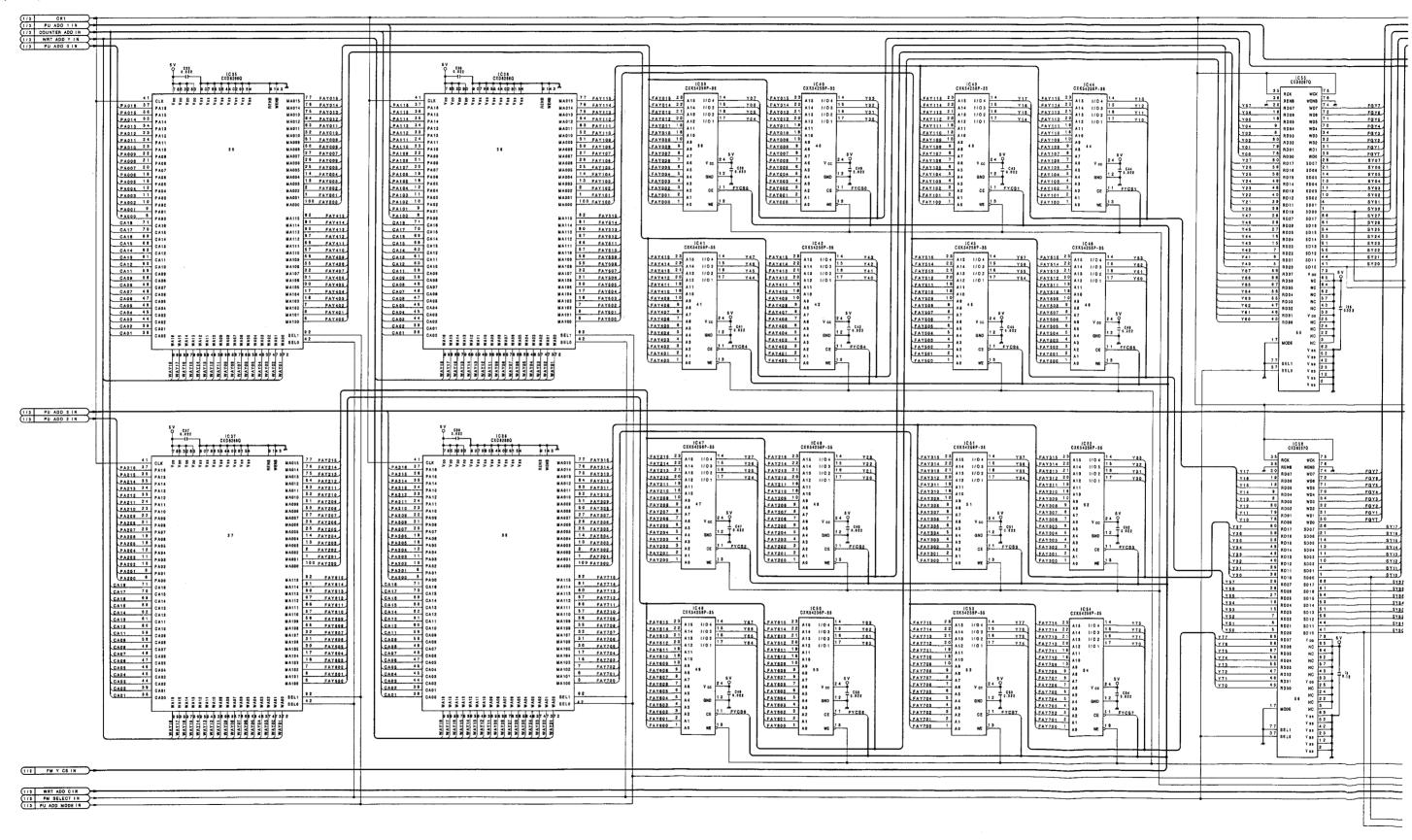
MY-54(1/3); Control Register, Address Counter, Title Key Process





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MY-54(2/3); Video Effect Memory



5 – 3 1

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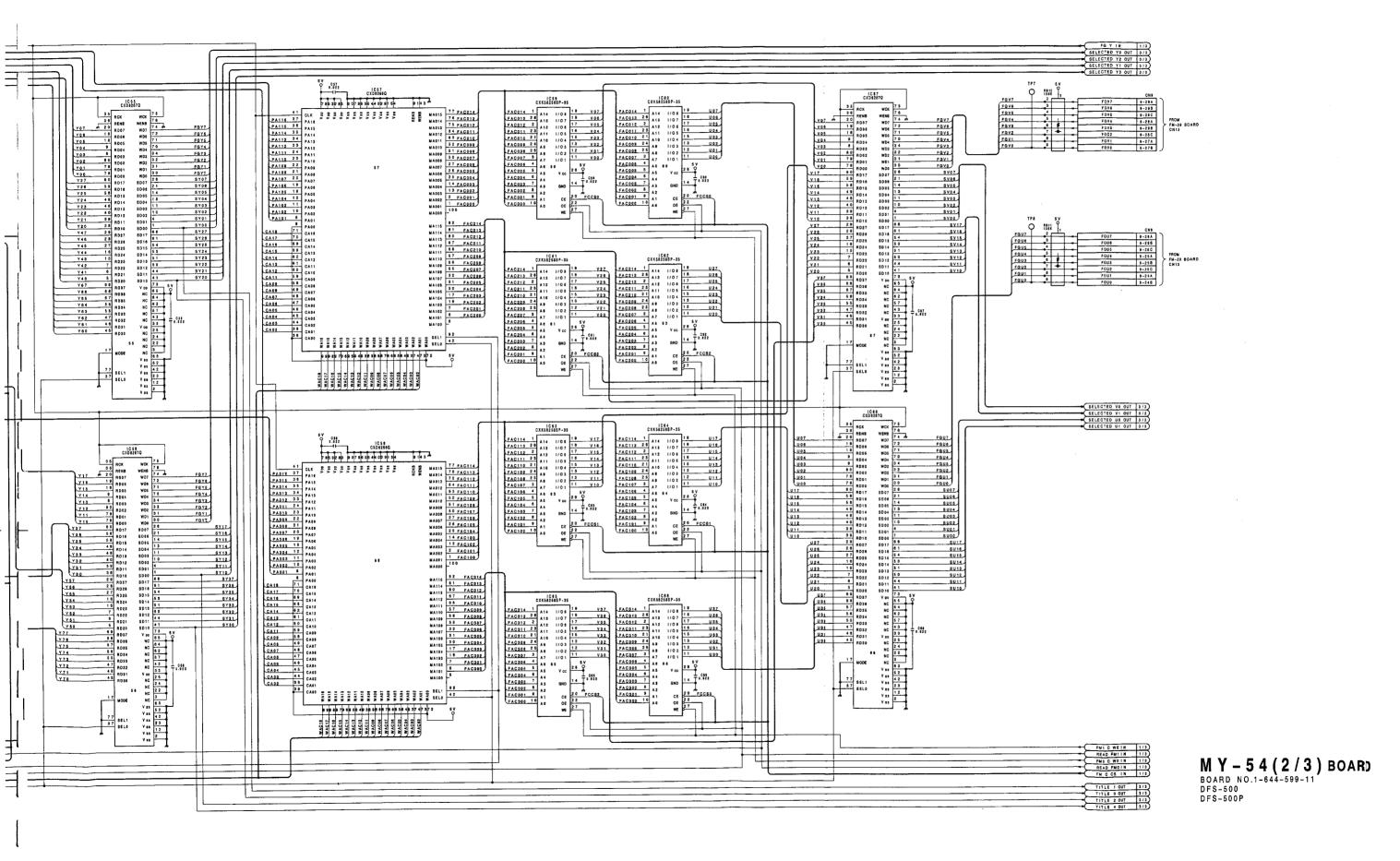
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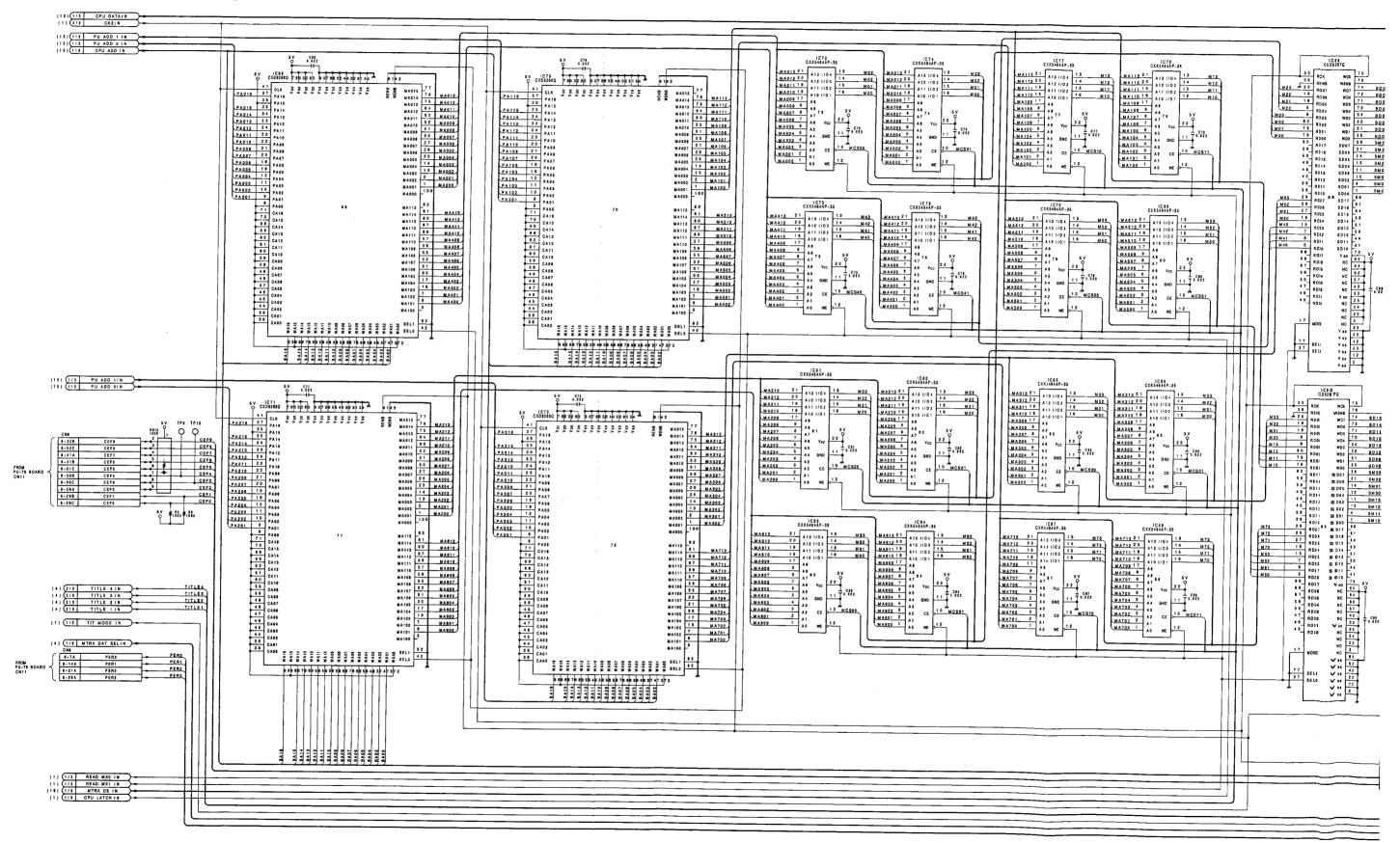
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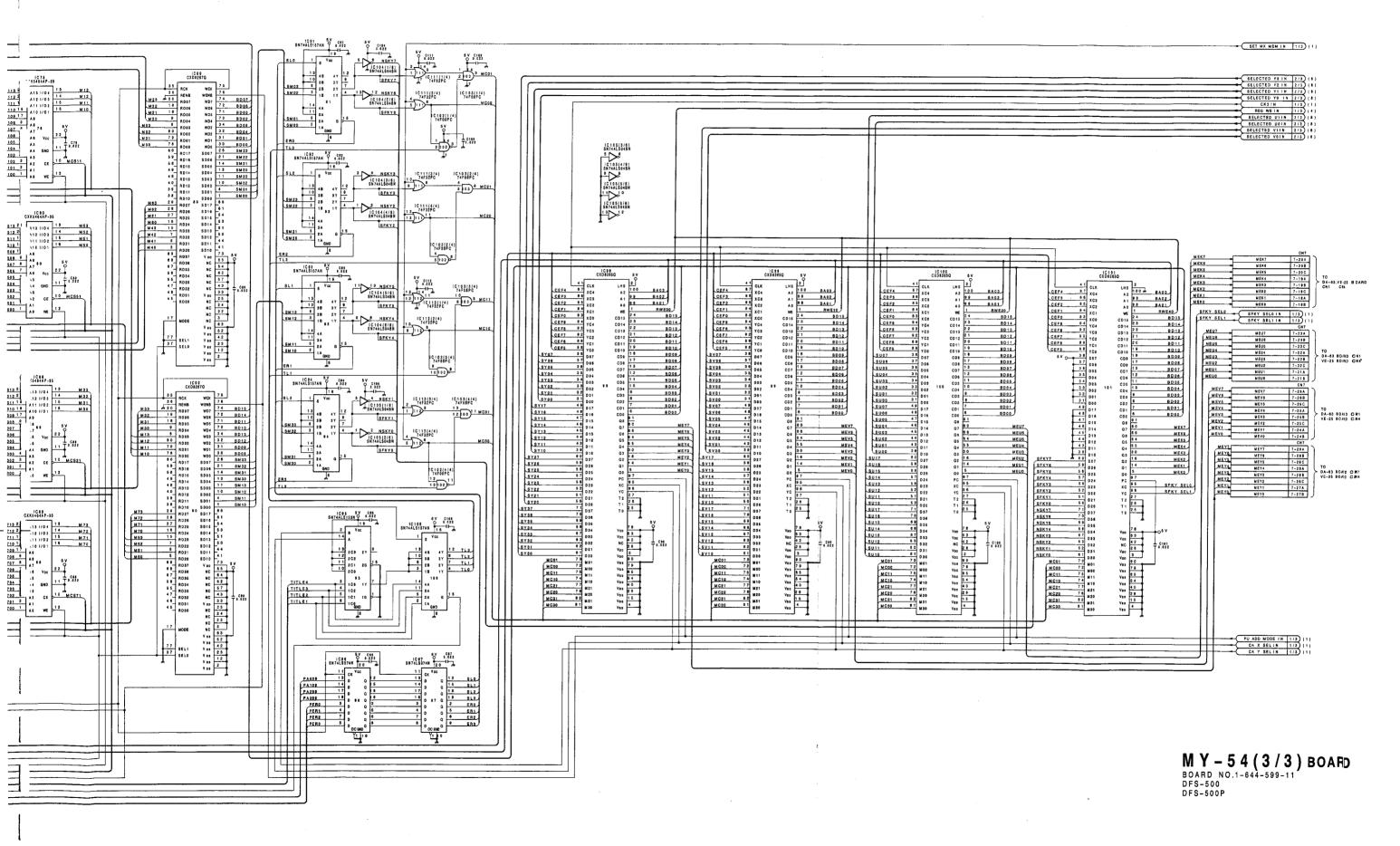


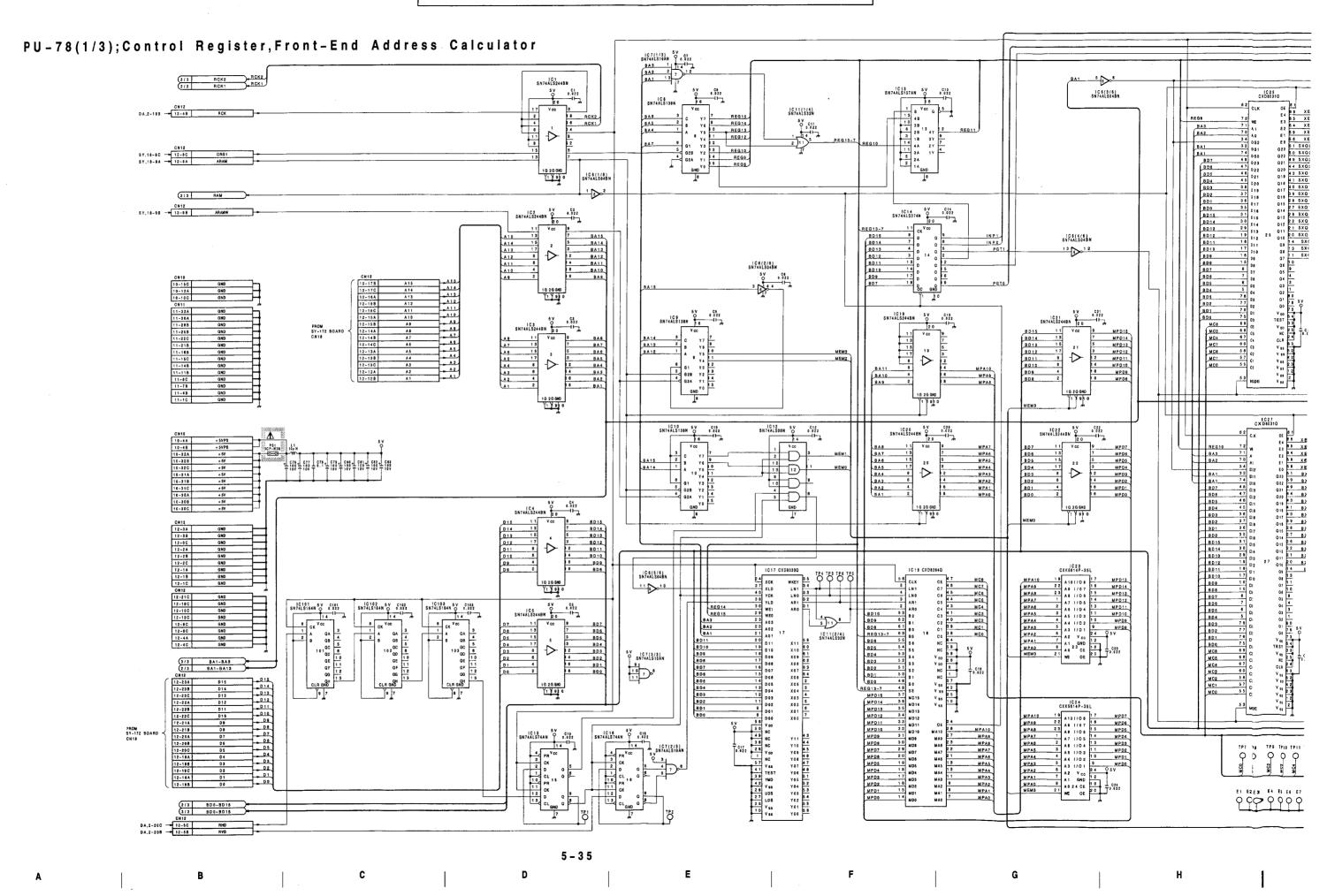
MY-54(3/3); Matrix Memory, Interpolater

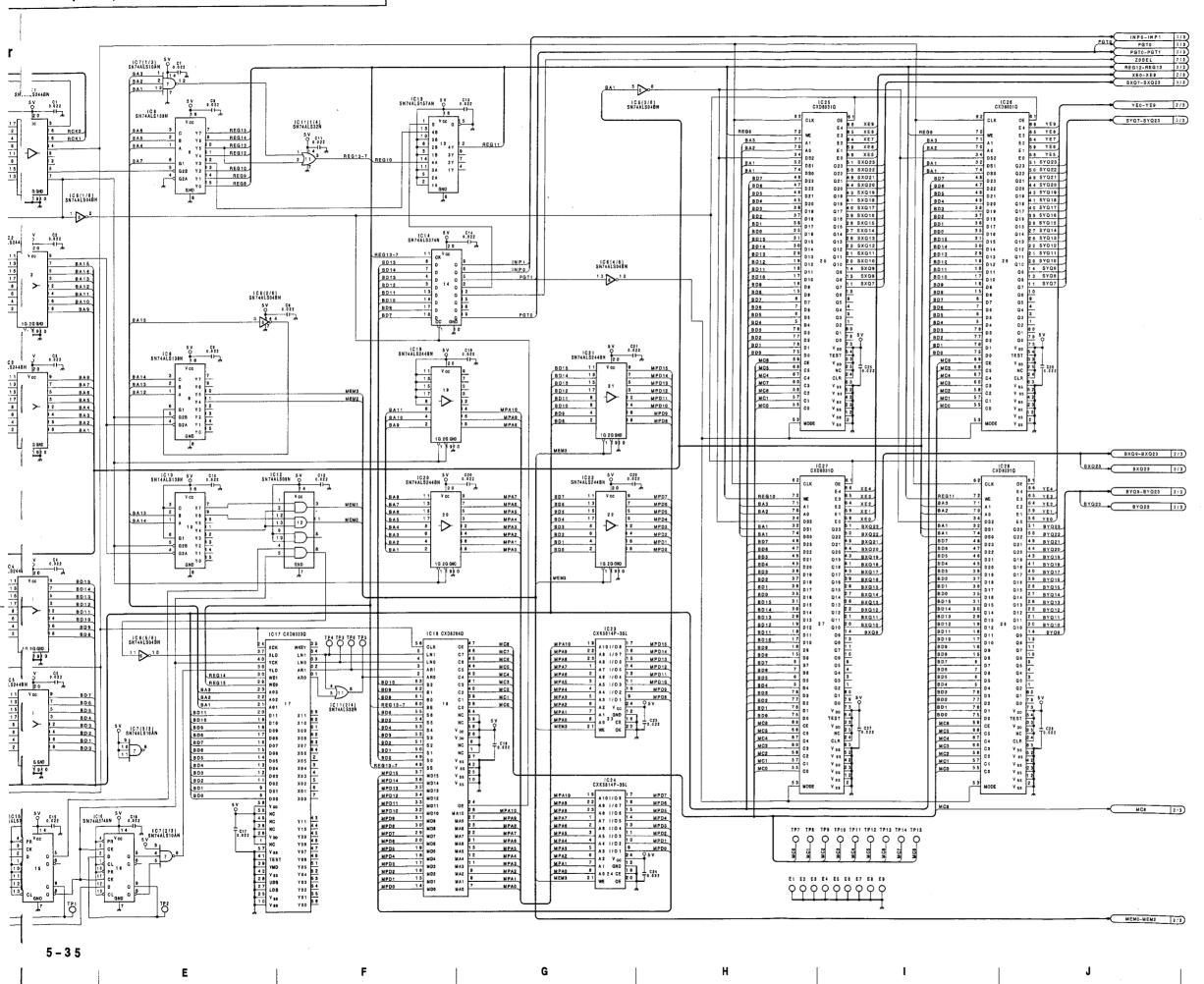


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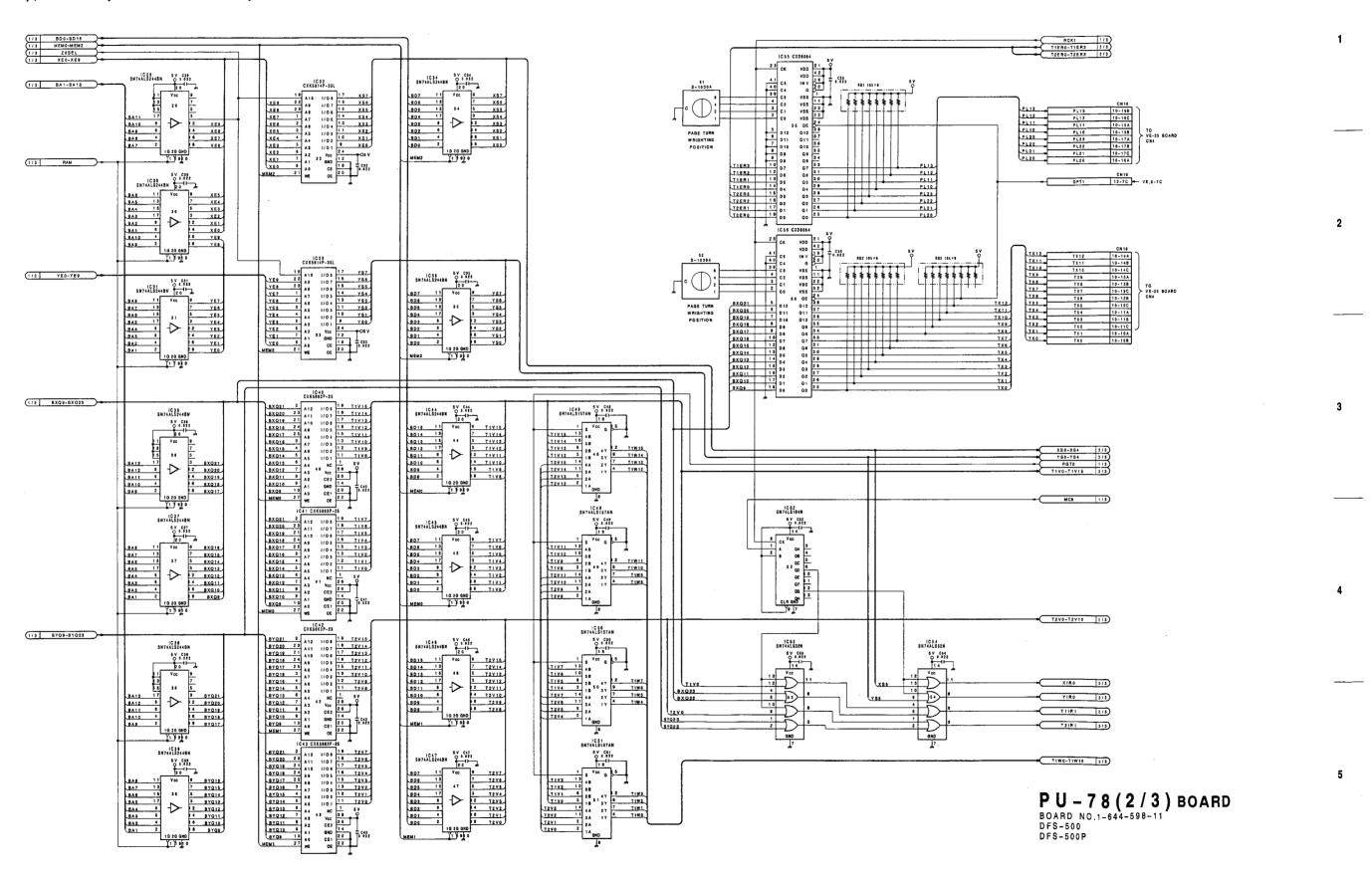




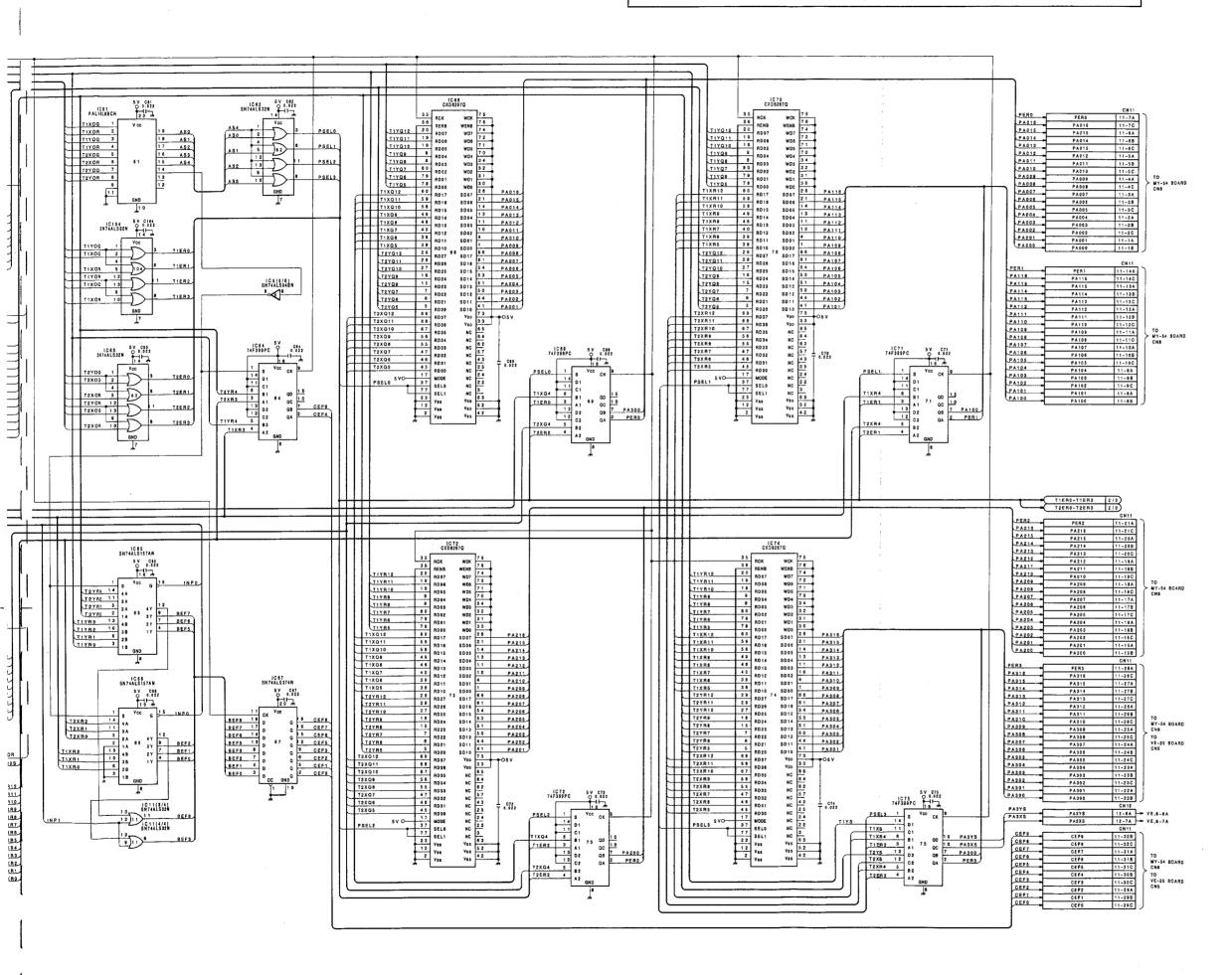


PU-78(1/3) BOARD
BOARD NO.1-644-598-11
DFS-500
DFS-500P

PU-78(2/3);Look Up Table Memory



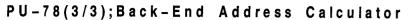
5 - 37

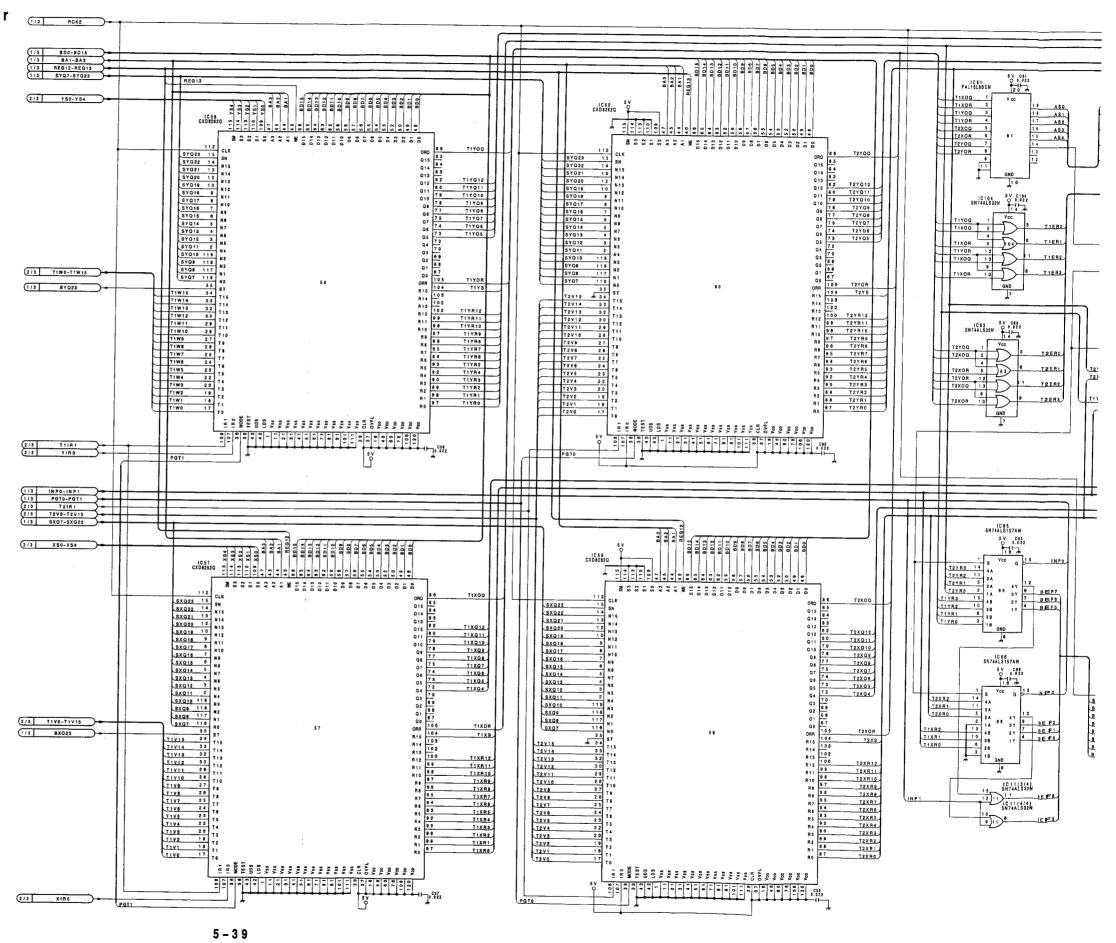


PU-78(3/3) BOARD
BOARD NO.1-644-598-11
DFS-500
DFS-500P

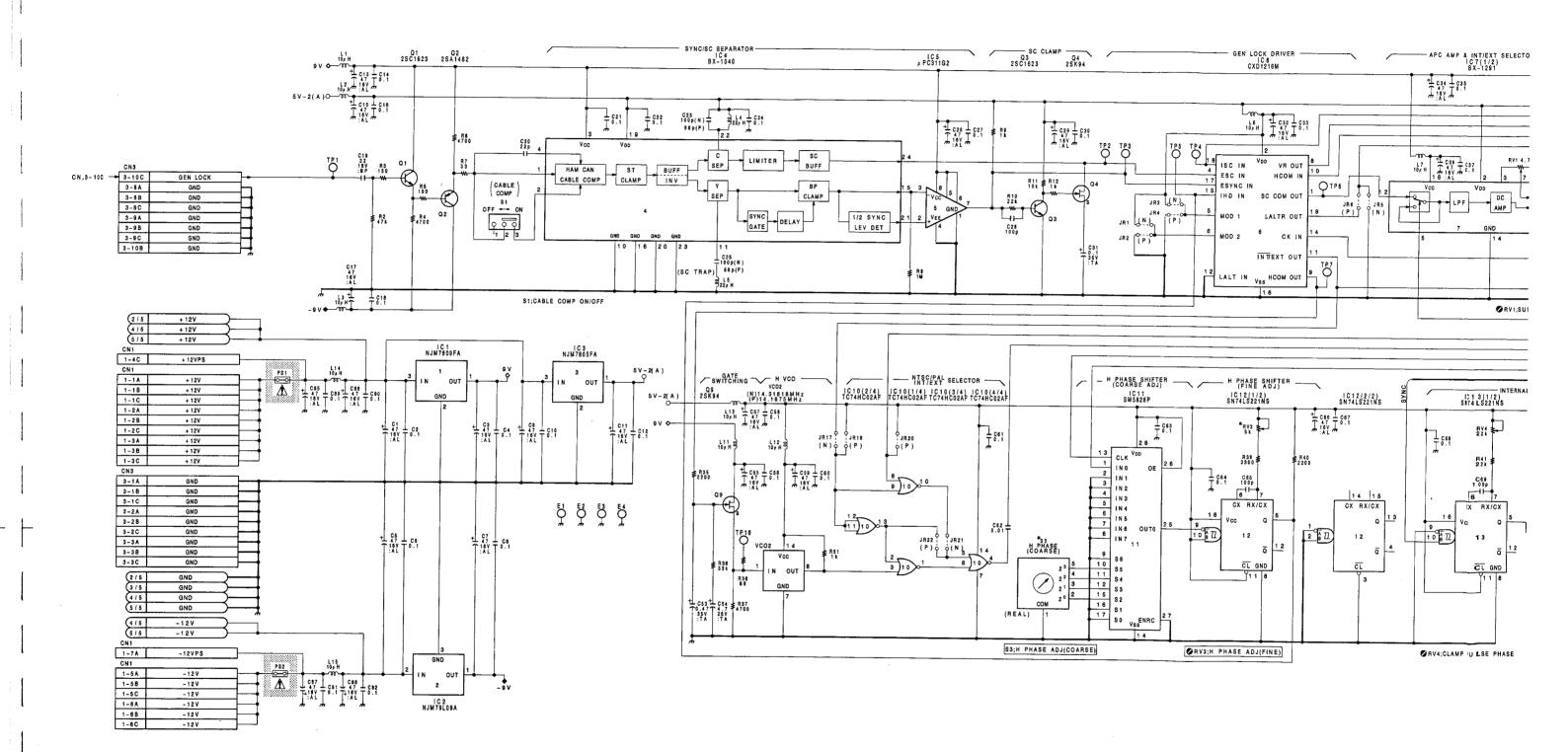
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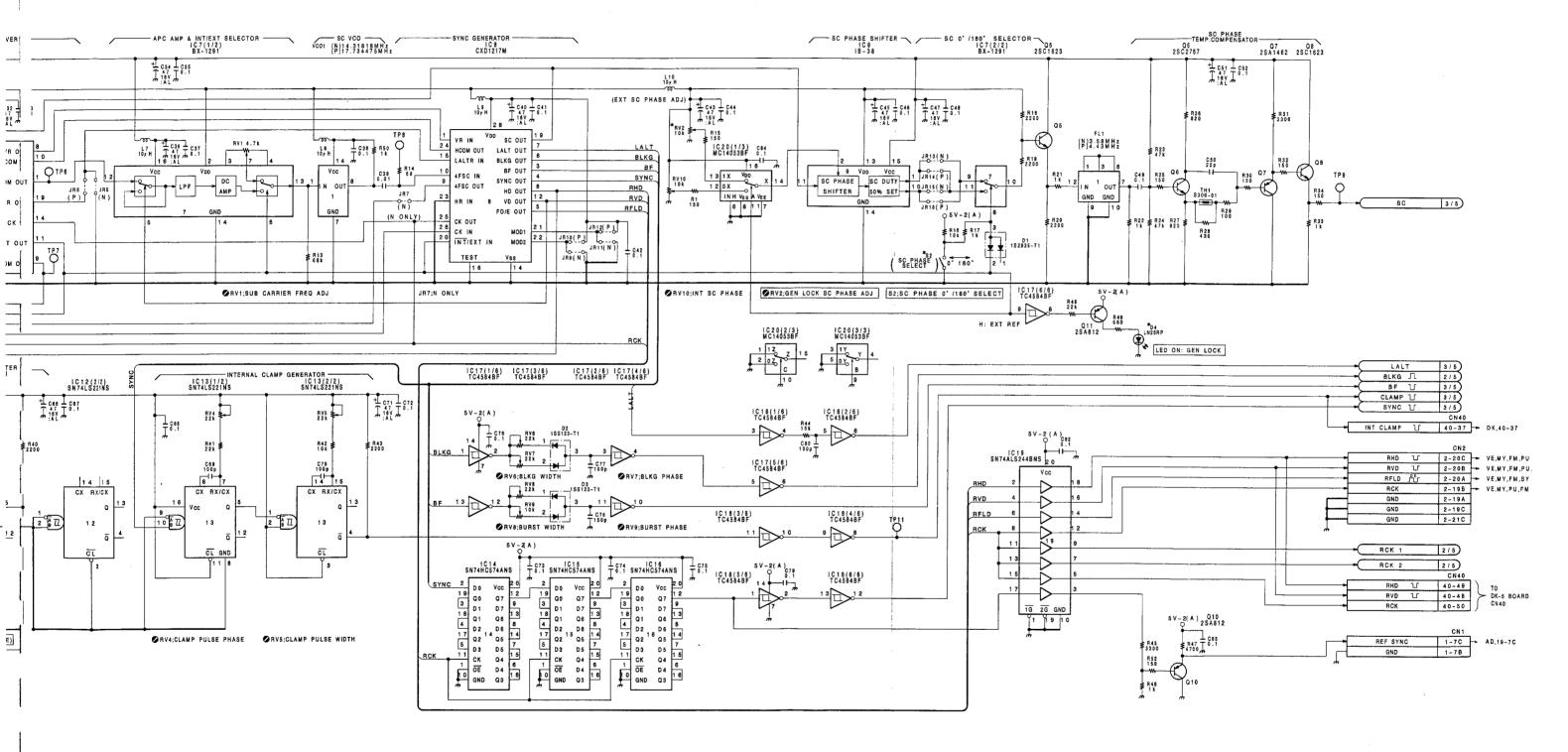




DA-63(1/5); SYNC Generator

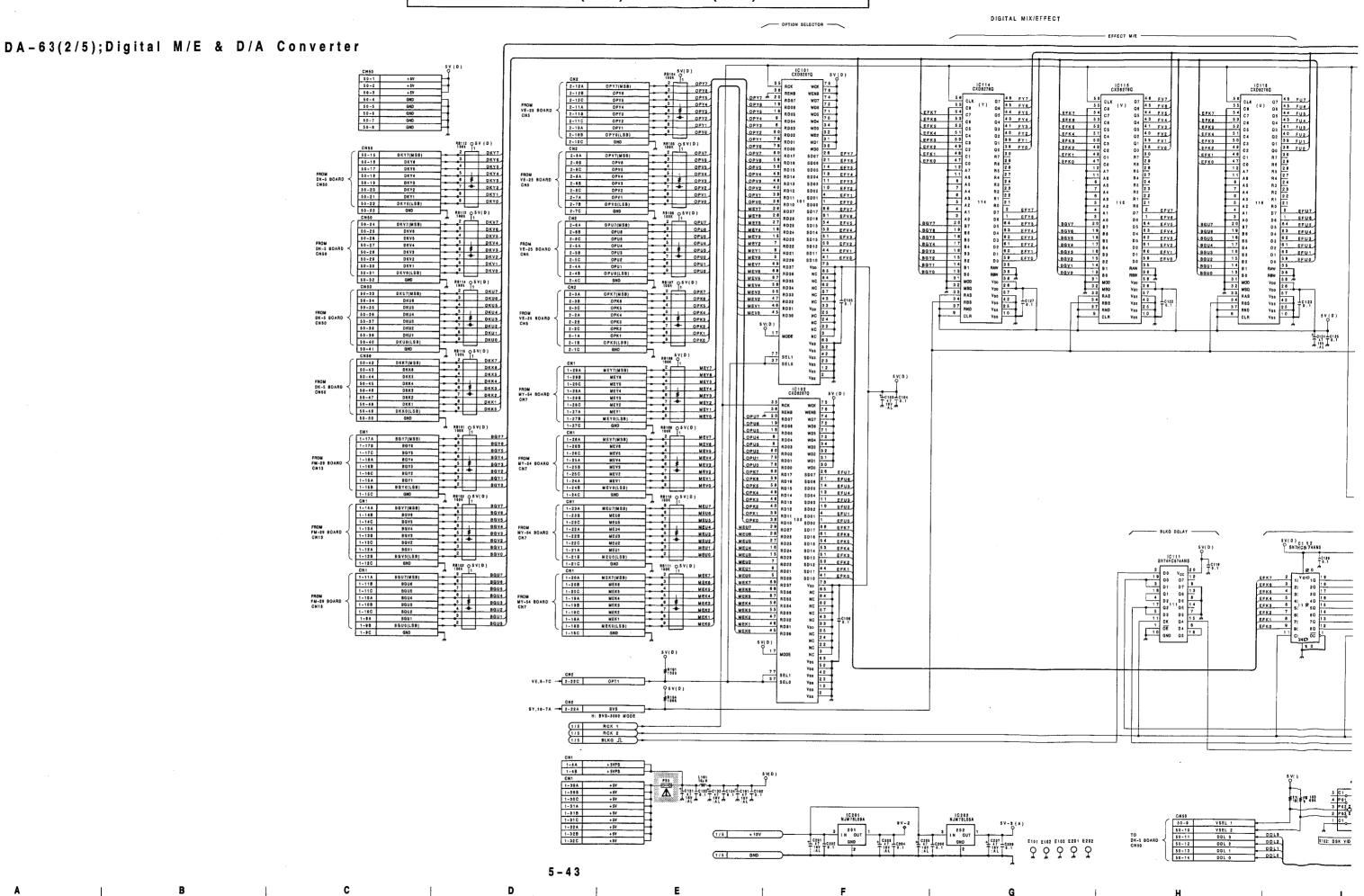


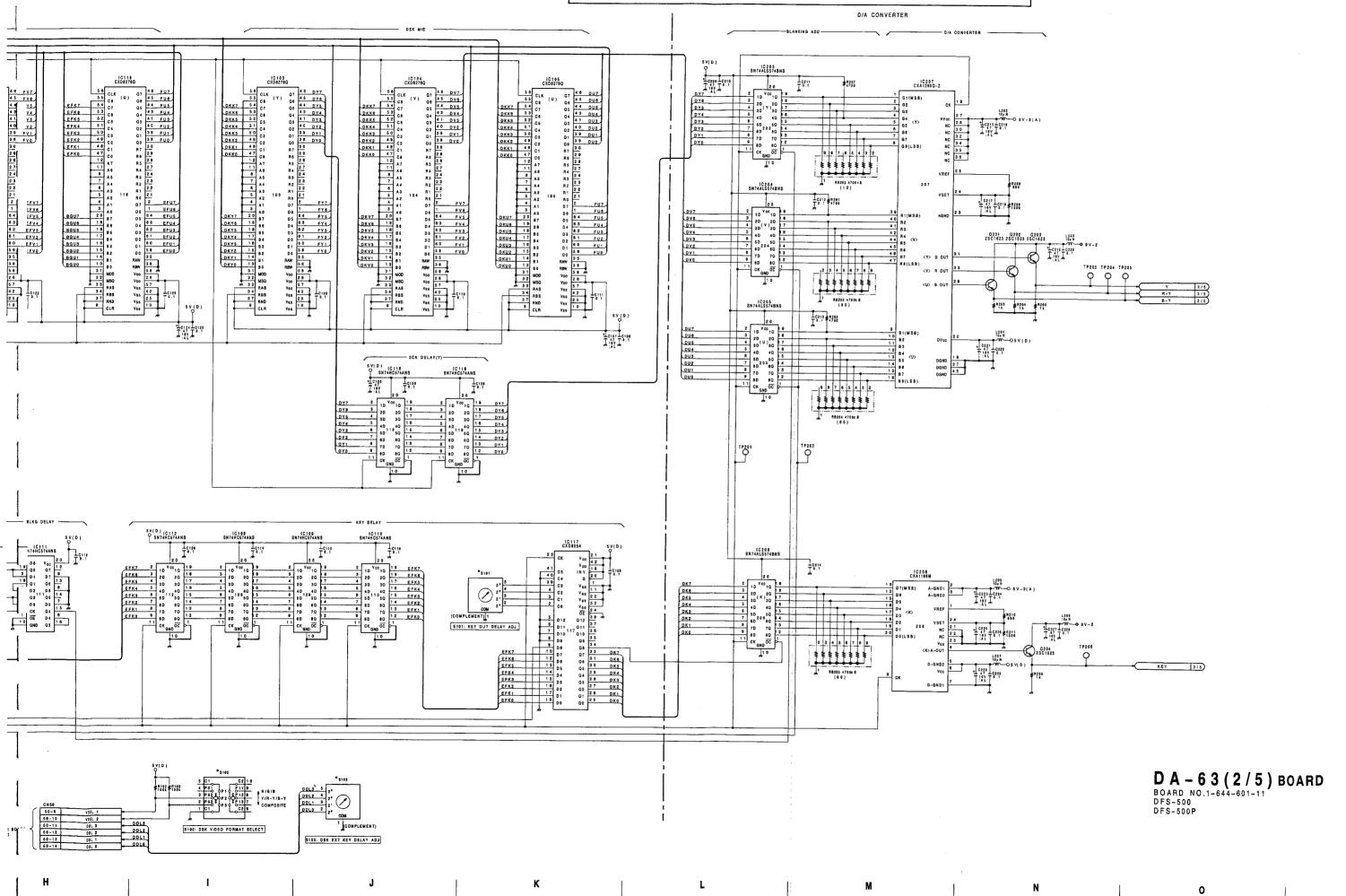
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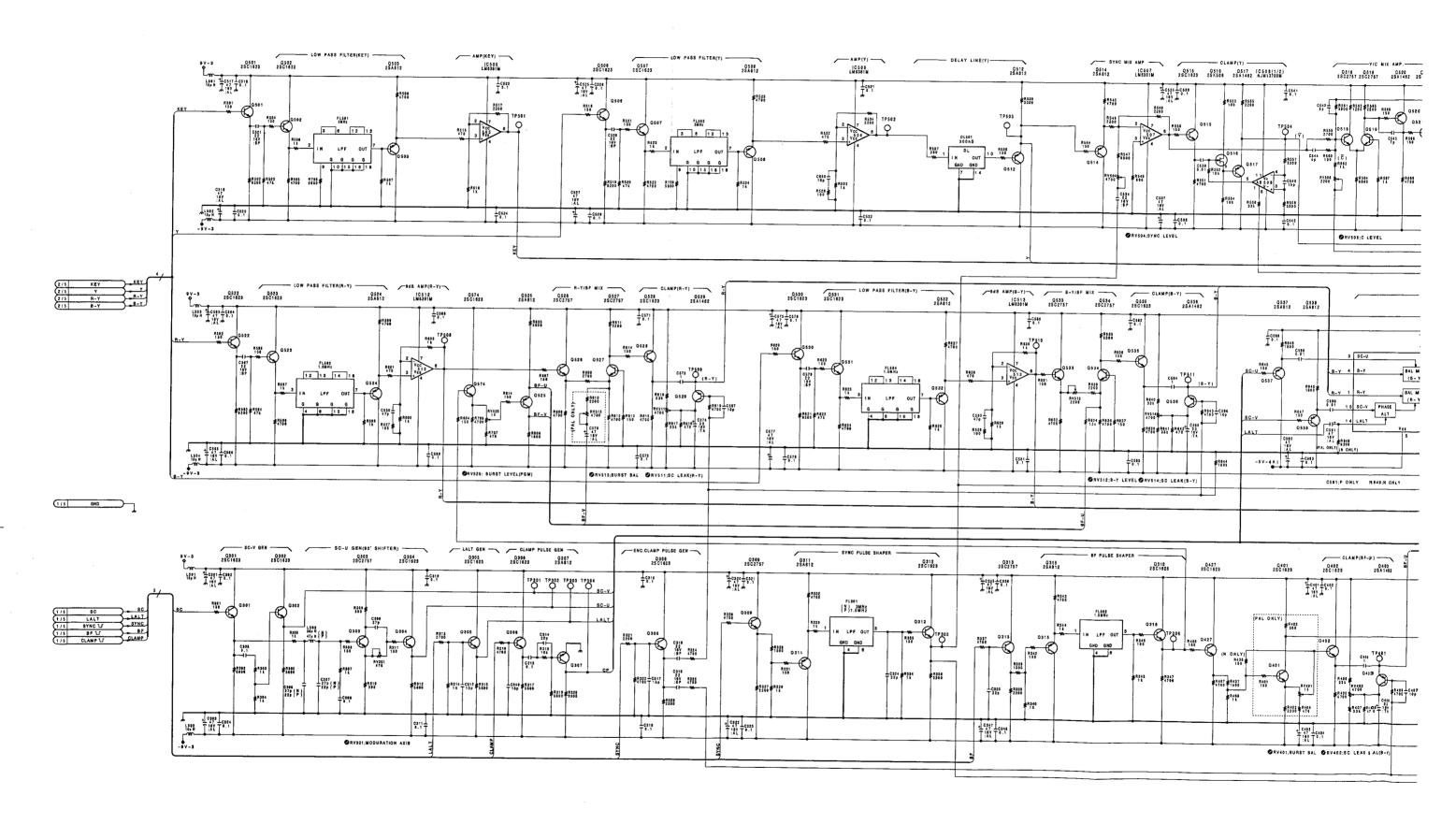
DA-63(1/5)BOARD BOARD NO.1-644-601-11

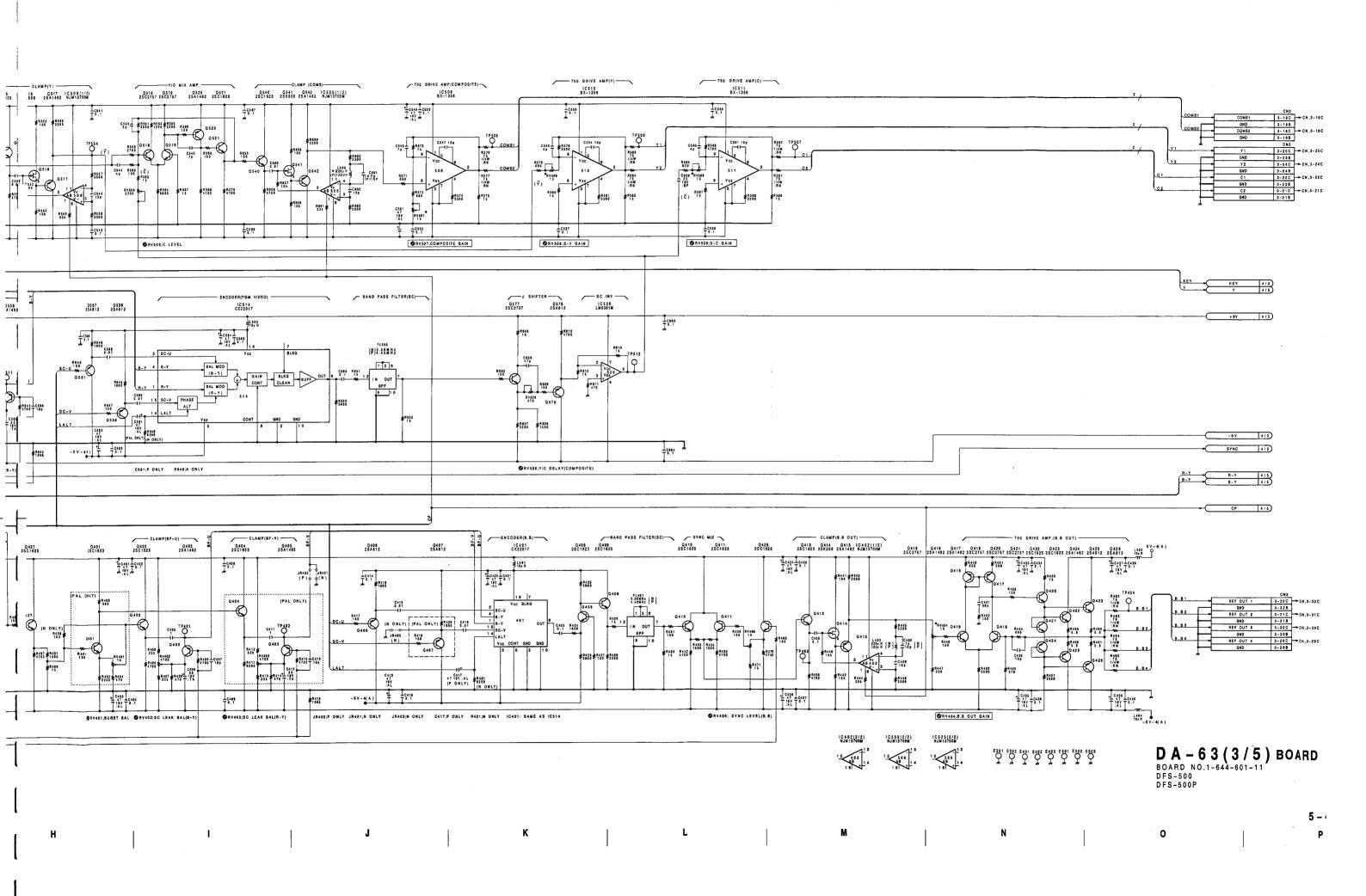
DFS-500P



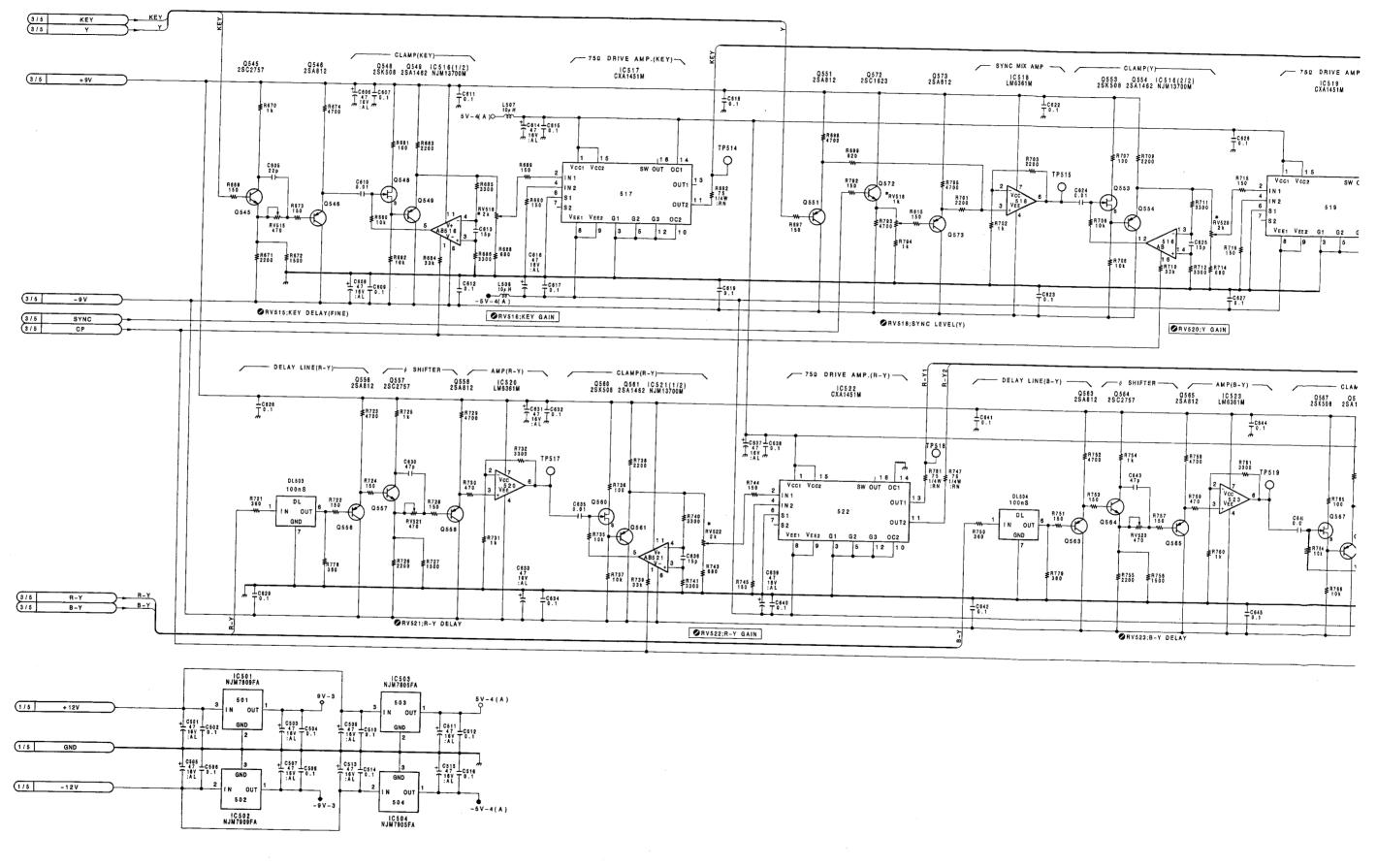


DA-63(3/5); PGM Out(Composite, S) Processor & B.B Generator





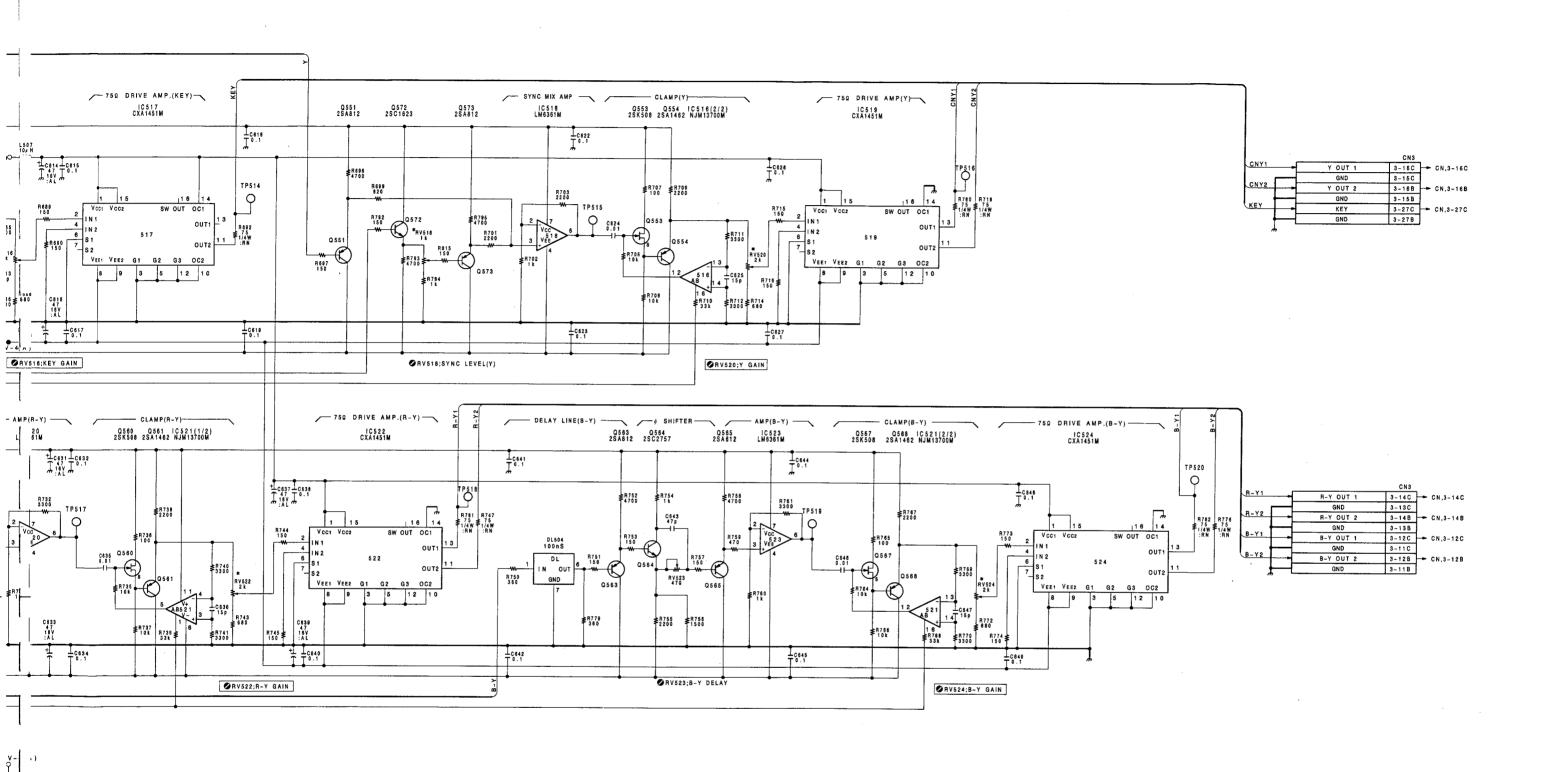
DA-63(4/5); PGM Out (Component) & Key Out PRO



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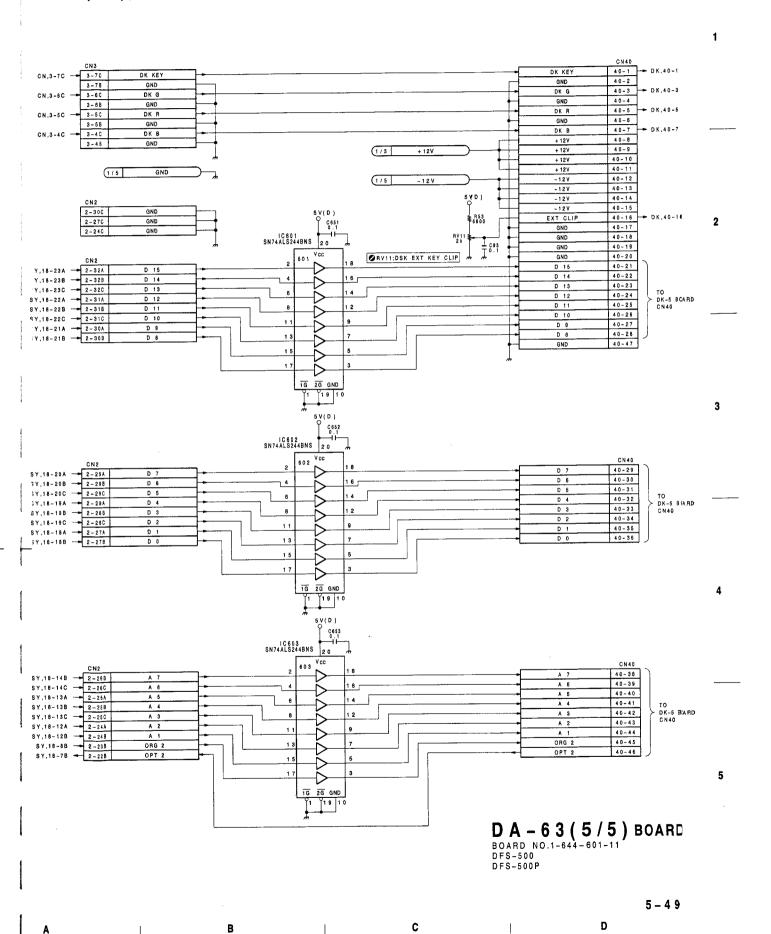


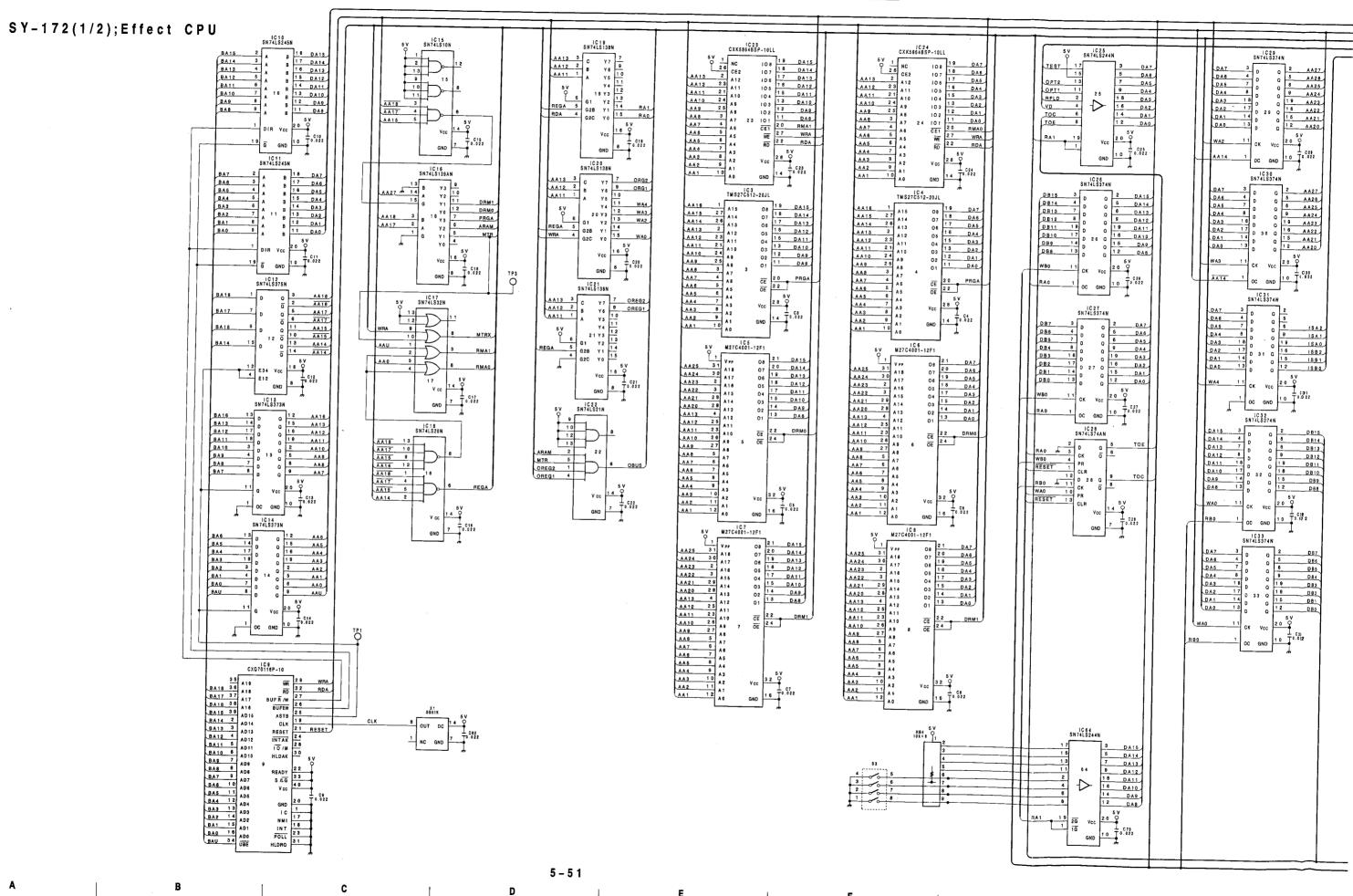
DA-63(4/5) BOARD
BOARD NO.1-644-601-11

5-47

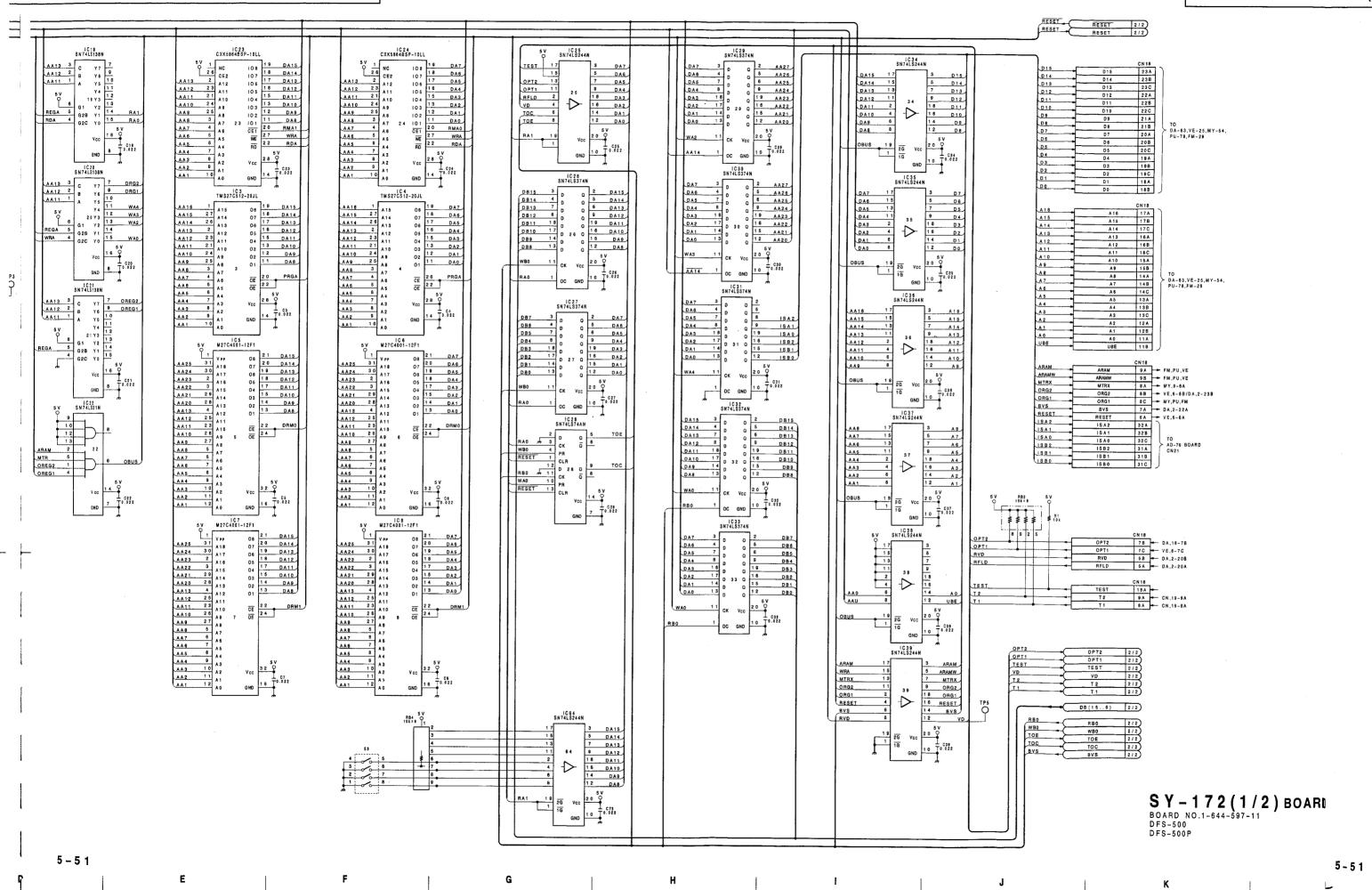
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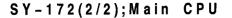
DA-63(5/5); Address & Data Bus Driver

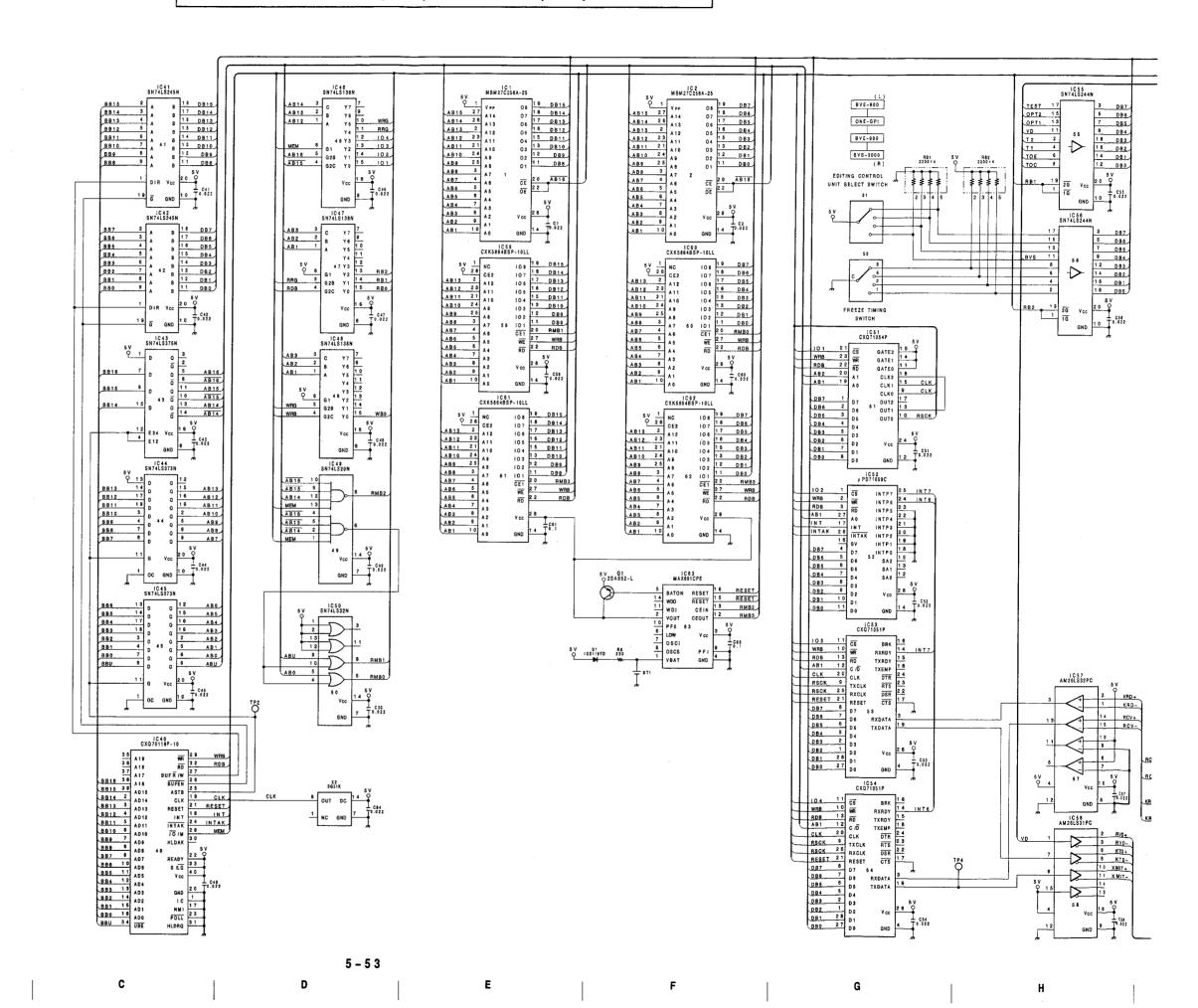


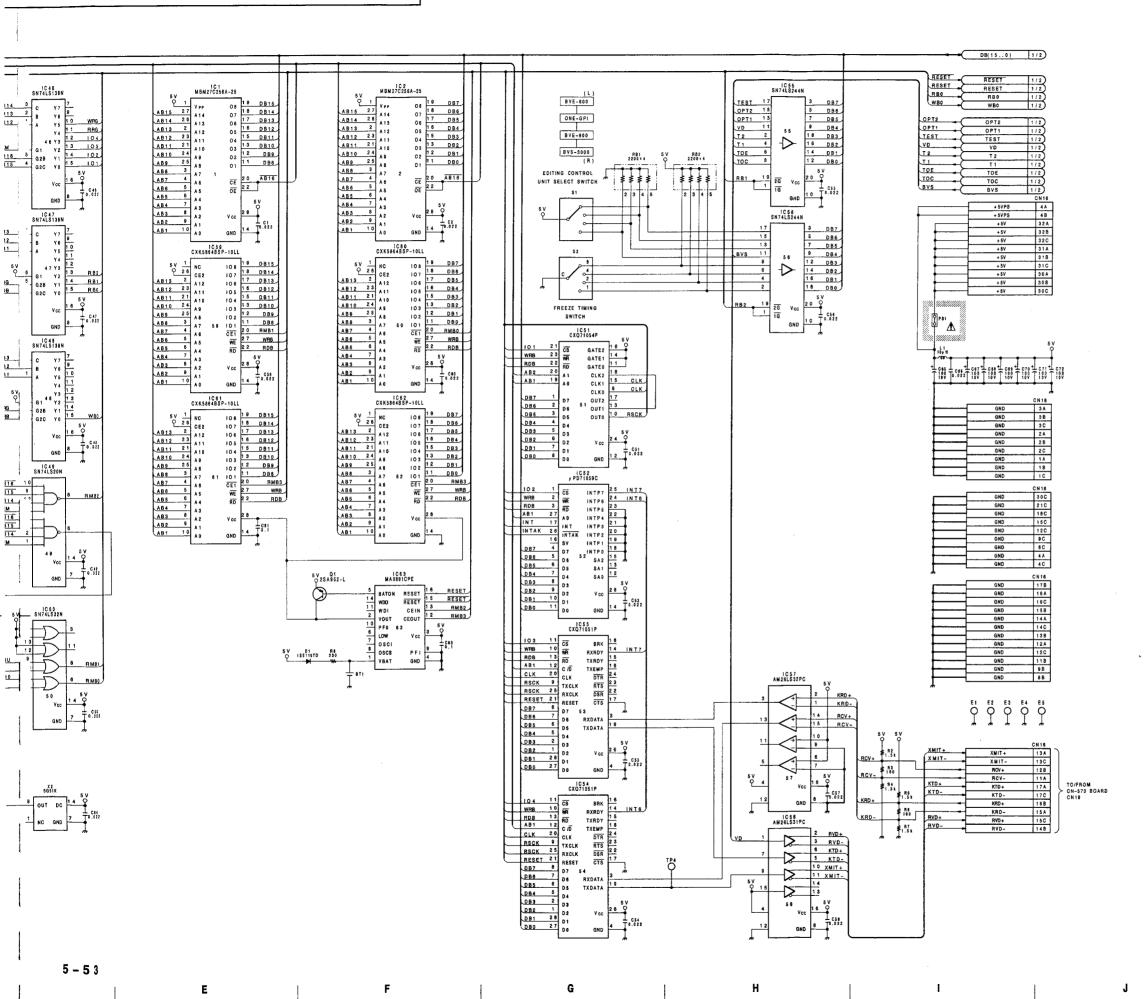


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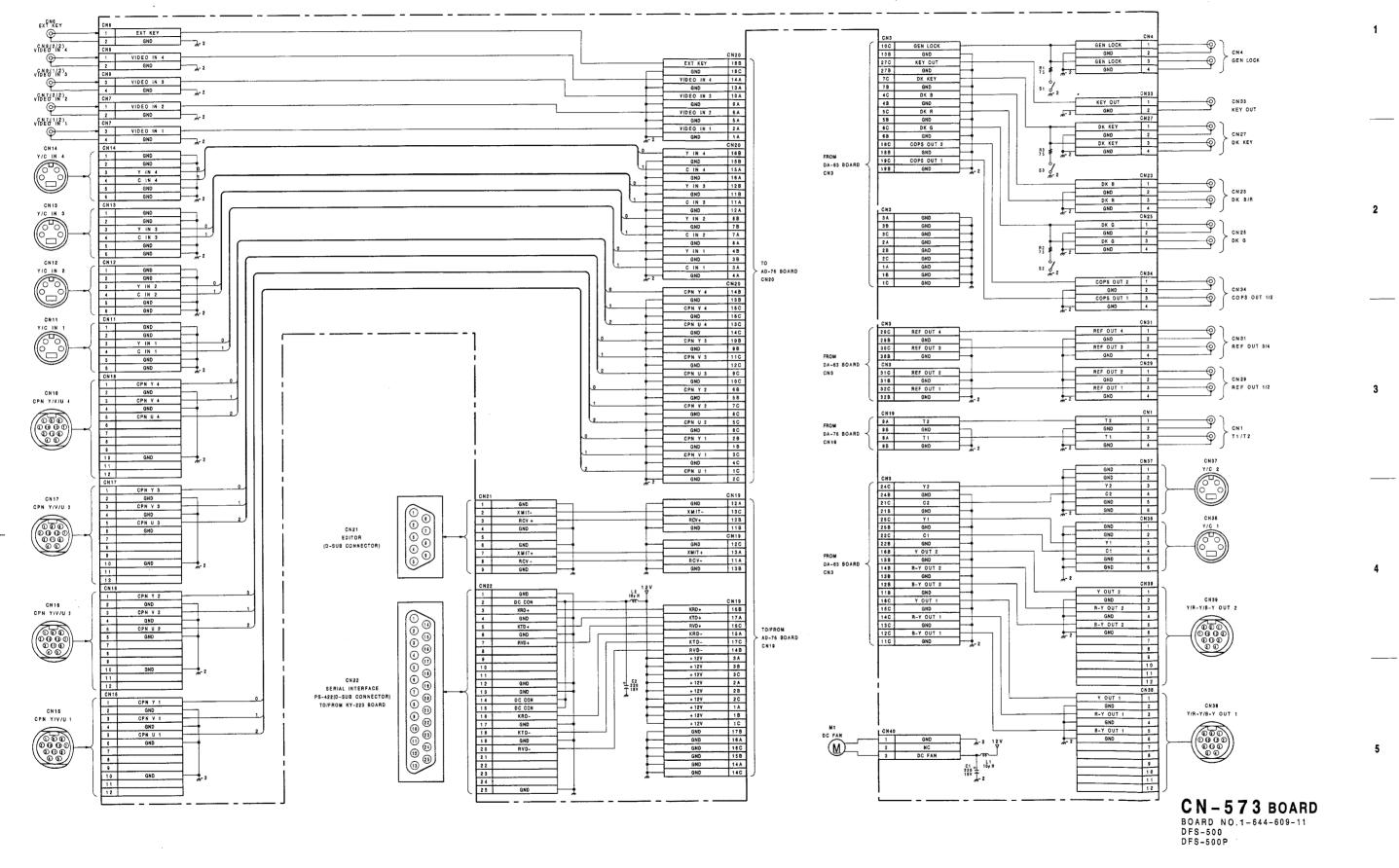


SY-172(2/2)BOARD NO.1-644-597-11
DFS-500
DFS-500P

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CN-573; Connector Board



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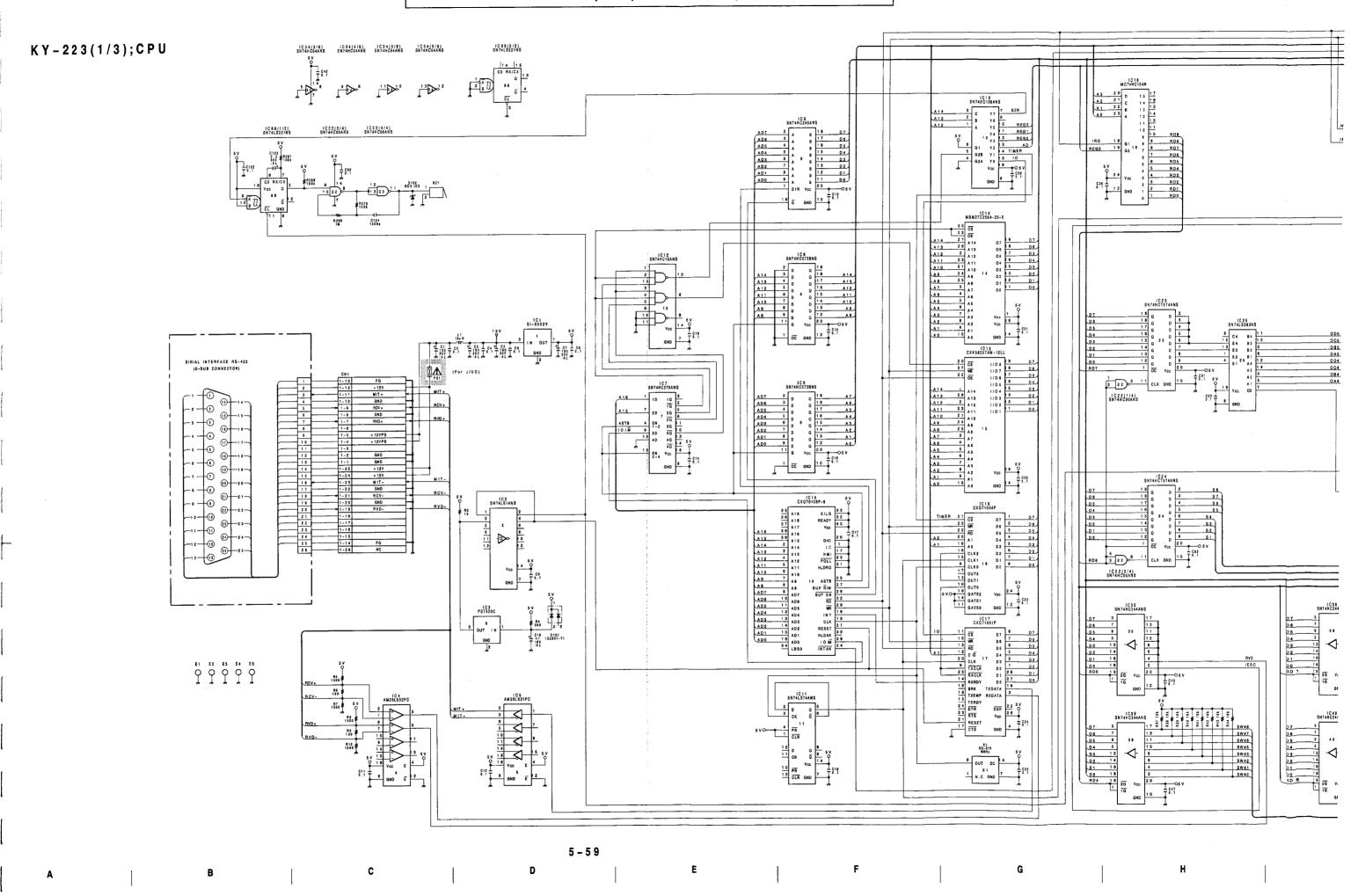
DA-63	VE-25	MY – 5 4	PU-78	F M- 29
MB-385; Mother Board A	CN6 32 A B C 31 31 30 30 28 28 28 28 28 28 28 28 28 28 28 28 29 20 21 22 22 22 22 24 23 D 18 D 14 D 13 C 22 21 D 9 D 8 D 08 D 00 D 7 D 0 0 D 0 0 D 7 D 0 0 D 0 0 D 7 D 0 0 0 D 0 0 0 D 0	7 FGV 1 FGV 0 GND 8 FGU 7 FGU 8 FGU 8 5 FGU 4 FGU 9 GND 9 D 15 D 14 D 13 2 D 15 D 14 D 13 2 D 15 D 14 D 15 2 D 12 D 11 D 10 1 D 9 D 8 GND 0 D 7 D 6 D 5 9 D 4 D 3 D 2 9 D 1 D 0 GND 7 A 18 A 15 A 14 5 A 13 A 12 A 11 6 A 10 A 9 GND 4 A 8 A 7 A A 6 3 A 6 A 4 A 3 2 A 2 A 1 GND 1 A 0 USE 0 GND 1 NTEX 1 GND 1 GN	ON12 A B C 32 A B C 31 31	CN15 A B C 32 FGY 7 FGY 8 FGY 5 31 FGY 4 FGY 5 FGY 5 30 FGY 1 FGY 0 GN0 29 FGY 7 FGY 8 FGY 5 29 FGY 7 FGY 0 GN0 28 FGY 1 FGY 0 GN0 28 FGY 1 FGY 0 GN0 20 FGY 1 FGY 0 GN0 21 FGY 1 FGY 0 GN0 22 FGY 1 FGY 0 GN0 22 FGY 1 FGY 0 GN0 23 FGY 1 FGY 0 GN0 24 FGY 1 FGY 0 GN0 25 FGY 1 FGY 0 GN0 22 FGY 7 FGY 0 GN0 22 FGY 7 FGY 0 GN0 22 FGY 7 FGY 0 GN0 22 GN0 24 FGY 1 FGY 0 GN0 25 FGY 1 FGY 0 GN0 21 D 9 D 8 GW0 22 D 12 D 11 D 10 21 D 9 D 8 GW0 22 D 17 D 0 GN0 21 D 9 D 8 GW0 22 D 17 A 16 A 14 18 D 1 D 0 GW0 17 A 16 A 14 18 A 13 A 12 A 11 15 A 10 A 9 GW0 17 A 16 A 14 18 A 13 A 12 A 11 15 A 10 A 9 GW0 11 GN0 GN0 IN KEY GN0 9 ARAM ARAWW GWO 9 ARAM ARAWW GWO 10 GNO GNO GNO GNO 11 GNO GNO GNO GNO GNO 11 GNO GNO GNO GNO GNO 11 GNO GNO GNO GNO GNO
CN2 A S C 32 D 15 D 14 D 13 S1 D 12 D 11 D 10 S3 D 8 D 8 OND 28 D 7 D 8 OND 29 D 7 D 8 OND 21 D 1 D 0 GND 24 A A A A A A A A A A A A A A A A A A A	CM6 A B C 32 GMD CEF 6 CEF 8 31 30 GMD CEF 4 CEF 3 29 GMD PA 316 27 PA 315 PA 314 PA 319 28 PA 312 PA 311 PA 310 25 PA 307 PA 308 PA 308 24 PA 307 PA 308 PA 308 22 PA 301 PA 303 PA 302 22 PA 301 PA 300 GMD 21 1 20 GMD 21 1 20 GMD 21 1 20 GMD 21 1 21 1 20 GMD 21 1 30 GMD 21 1 3	OND CEF 4 CEF 3 O CEF 2 CEF 1 O CEF 2 O CEF 3 O CEF 3 O CEF 3 O CEF 4 O CEF 5 O CEF 1 O CEF 9 O CEF 3 O CEF 1 O CEF 9 O CEF 3 O CEF 1 O CEF 3 O	CN11 A B C 32 GND CEF 8 CEF 8 31 CEF 7 CEF 6 OEF 6 30 GND CEF 4 CEF 3 28 CEF 2 CEF 1 CEF 6 28 PER 3 GND PA 316 27 PA 315 PA 311 PA 310 28 PA 312 PA 311 PA 310 25 PA 300 GND PA 308 24 PA 307 PA 308 PA 306 22 PA 301 PA 308 PA 306 22 PA 301 PA 309 GND PA 308 22 PA 301 PA 301 PA 310 GND 21 PER 2 GND PA 216 20 PA 215 PA 217 PA 218 19 PA 212 PA 211 PA 210 18 PA 200 GND PA 208 17 PA 200 GND PA 208 17 PA 201 PA 200 GND 18 PA 200 GND PA 200 GND 17 PA 201 PA 200 GND 18 PA 201 PA 200 GND 19 PA 212 PA 211 PA 210 18 PA 200 GND PA 208 19 PA 212 PA 311 PA 210 18 PA 200 GND PA 208 19 PA 212 PA 311 PA 210 18 PA 200 GND PA 208 19 PA 212 PA 311 PA 210 19 PA 115 PA 110 GND 14 PER 1 GND PA 118 13 PA 115 PA 114 PA 113 12 PA 115 PA 114 PA 113 12 PA 115 PA 114 PA 113 12 PA 115 PA 114 PA 116 13 PA 109 GND PA 108 9 PA 109 GND PA 108 9 PA 100 PA 108 9 PA 101 PA 100 GND 7 PER 0 GND PA 100 8 PA 101 PA 100 GND 7 PER 0 GND PA 006 9 PA 007 PA 008 2 PA 004 PA 009 GND 9 PA 006 2 PA 005 PA 009 GND 9 PA 007 PA 008 9 PA 007 PA 008 9 PA 007 PA 008	C M 14 A B C 3 2 GND GND GND GND 3 1 BWFLD BWVD BWFD 3 0 GND BWCK GND 2 8 BWY 7 BWY 6 BWY 3 2 8 BWY 4 BWY 3 BWY 2 2 7 BWY 1 BWY 6 GND 2 6 BWV 7 BWY 6 BWY 3 2 8 BW 4 BWY 3 BWY 1 2 7 BWY 1 BWY 0 GND 2 8 BW 4 BWY 3 BWY 1 2 9 BWU 7 BWY 6 BWU 1 2 1 BWU 7 BWU 6 BWU 1 2 2 BWU 7 BWU 6 BWU 1 2 1 BWU 1 BWU 6 BWU 1 2 1 BWU 1 BWU 6 GND 2 2 BWU 4 BWU 3 BWU 1 2 1 BWU 1 BWU 0 GND 2 1 9 SLCT KEY GND BUS CORT 1 8 TT 1 7 TT 1 6 TT 1 7 TT 1 8 TT 1 9 SLCT KEY GND BUS CORT 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
S	3 +12V +12V +12V 2 +12V +12V +12V 2	+SV +SV +SV +SV +SV) +SV +SV +SV +SV +SV) MEY 7 MEY 8 MEY 8 MEY 8 MEY 1 MEY 0 OND MEV 7 MEV 8 MEV 8 MEV 8 S MEV 4 MEV 3 MEV 2 MEV 1 MEV 0 OND MEV 7 MEU 8 MEU 2 OND MEU 7 MEU 8 MEU 5 MEU 4 MEU 0 OND MEU 7 MEU 8 MEU 5 MEU 1 MEU 0 OND MEU 1 MEU 0 OND MEU 1 MEU 0 OND MEK 7 MEK 8 MEK 2 J MEK 1 MEK 0 GND NC(-12VPS) -12V -12V -12V -12V MC(-5VPS) NC(-5VPS) NC(-12VPS)	CN16 A B C 32 +5Y -5Y +5Y +5Y 311 +5Y +5Y +5Y +5Y 310 +5Y +5Y +5Y +5Y 29	CN13 2
A C	D	E	F G	H

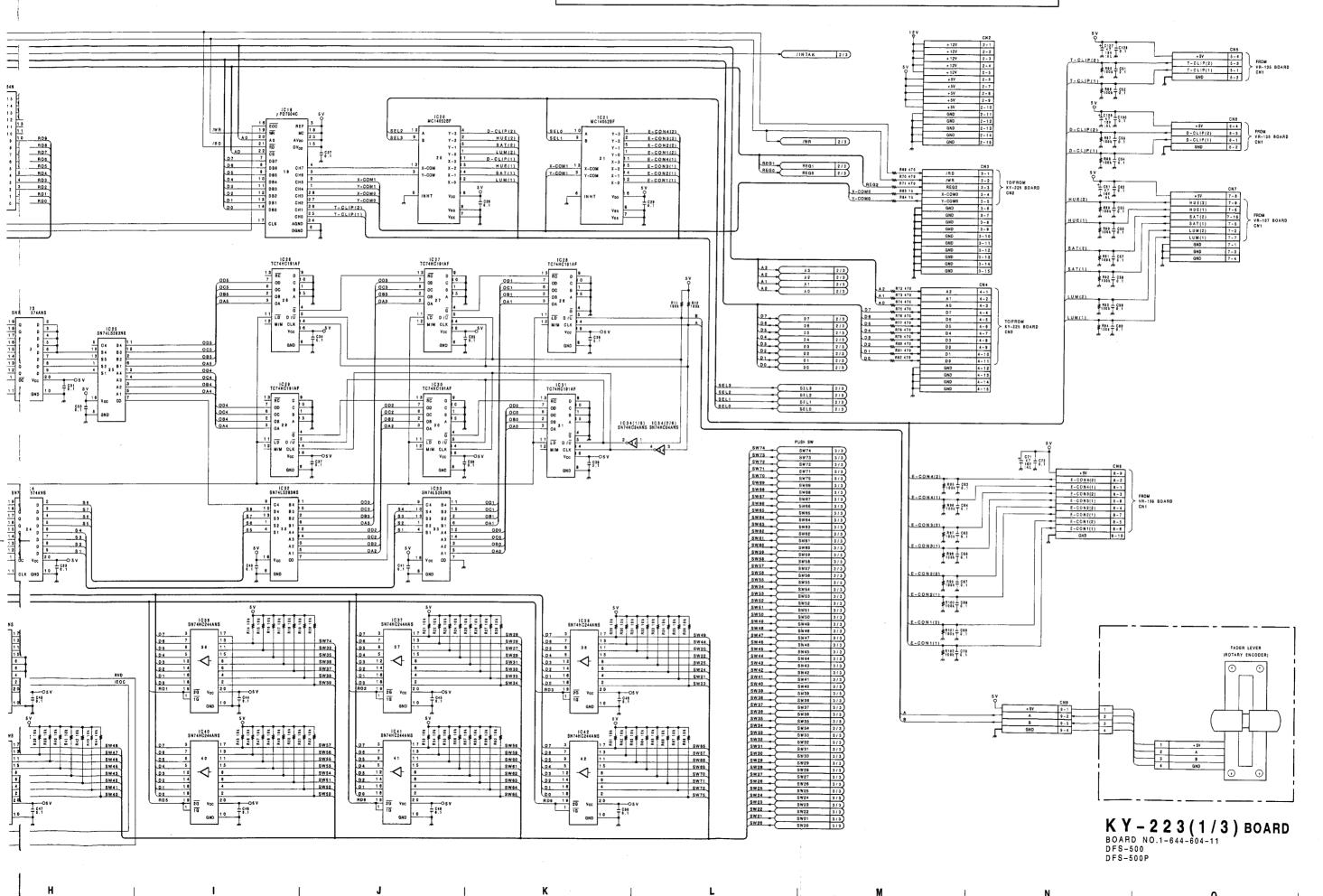
MY-54	PU-78	F M- 29	SY-172	AD-76
CN9 C A B C GN7 32 FGY 7 FGY 6 FGY 5 311 FGY 4 FGY 3 FGY 2 30 FGY 1 FGY 0 GND 28 FGY 7 FGY 8 FGY 8 28 FGY 7 FGY 8 FGY 8 28 FGY 1 FGY 0 GND 29 FGY 1 FGY 0 GND 21 FGY 1 FGY 0 GND 22 FGY 1 FGY 0 GND 23 D 15 D 14 D 13 23 D 15 D 14 D 13 23 D 15 D 14 D 13 22 D 17 D 10 D 10 D 10 D 10 21 D 9 D 8 GND 21 D 9 D 8 GND 3 GND 4 14 D 3 D 2 GND 10 D 4 D 3 D 2 GND 11 D D 0 GND 11 D D 0 GND 11 GND 12 A 15 A 15 A 14 A 15 A 15	29 29 28 28 28 27 26 25 26 25 24 23 D 15 D 14 D 13 22 D 12 D 11 D 10 21 D 9 D 4 D 3 D 5 19 D 4 D 3 D 2 18 D 1 D 0 GND 17 A 18 A 13 A 12 A 11 15 A 10 A 8 A 7 A 8 12 A 2 A 11 15 A 10 A 8 A 7 A 8 A 8 A 7 A 8 A 8 A 7 A 8 A 8 A 7 A 8 A 8 A 7 A 8 A 8 A 7 A 8 A 8 A 7 B A 8 A 8 A 7 B A 8 B A 7 B A 8 B A 7 B A 8 B A 7 B A 8 B A 7 B A 8 B A 7 B A 8 B A 7 B A 8 B A 7 B A 8 B A 7 B A 8 B A 7 B A 8 B A 7 B A 8 B A 7 B A 8 B A 7 B B B B B B B B B B B B B B B B B B B	CNIS A B C 32 FGY 7 FGY 6 FGY 5 31 FGY 4 FGY 3 FGY 2 30 FGY 1 FGY 0 GND 29 FGY 7 FGY 6 FGY 3 28 FGY 4 FGY 3 FGY 2 27 FGY 1 FGY 0 GND 28 FGY 4 FGY 3 FGY 2 27 FGY 1 FGY 0 GND 28 FGY 4 FGY 3 FGY 2 27 FGY 1 FGY 0 GND 28 FGY 7 FGU 8 FGU 5 22 TGY 1 FGY 0 GND 25 FGU 1 FGY 0 GND 25 FGU 1 FGY 0 GND 26 GND 27 FGU 1 FGY 0 GND 28 FGU 7 FGU 8 FGU 7 29 FGU 1 FGU 0 GND 20 D 7 FGU 0 GND 21 D 1 D 1 D 10 GND 21 D 1 D 0 GND 22 D 12 GND 23 D 15 D 14 D 13 21 D 9 D 0 GND 21 D 1 D 0 GND 22 D 12 C 1 GND 23 D 15 D 14 D 13 24 FGU 1 FGY 0 GND 25 GND 26 GND 17 A 15 A 14 27 A 16 A 11 18 A 13 A 12 A 11 18 A 13 A 12 A 11 19 A 15 A 14 A 8 A 7 A 6 13 A 6 A 4 A 3 11 GND 9 ARAM ARAMW GND 4 GND 10 GND 11 GND 10 GND 10 GND 11 GND 11 GND 12 GND 13 GND 14 GND 15 GND 16 GND 17 GND 18 GND 19 GND 10 GND 10 GND 11 GND 11 GND 11 GND 11 GND 12 GND 13 GND 14 GND 15 GND 17 GND 18 GND 19 GND 10 GND 10 GND 11 GND 12 GND 12 GND 13 GND 14 GND 15 GND 16 GND 17 GND 18 GND	CN18 A B C ISA C ISA T ISA G J IS S I ISB G J ISB C I	CN21 A 8 C 32 ISA 2 ISA 1 ISA 0 31 ISS 2 ISA 1 ISA 0 30 GND 20 GND 20 GND 21 GND 22 GND 23 GND 24 GND 25 GND 26 GND 27 GND 28 GND 29 GND 20 GND 21 GND 22 GND 23 GND 24 GND 25 GND 26 GND 27 GND 28 GND 28 GND 28 GND 28 GND 28 GND 29 GND 20 GND 20 GND 20 GND
C	30 GMD CEF 4 CEF 3 28 CEF 2 CEF 1 28 PER 3 GMD PA 316 27 PA 315 PA 314 PA 315 28 PA 312 PA 311 PA 310 25 PA 308 OMD PA 308 24 PA 307 PA 308 PA 308 24 PA 307 PA 308 PA 308 23 PA 304 PA 503 PA 302 23 PA 304 PA 503 PA 302 21 PER 2 OMD PA 216 20 PA 215 PA 211 PA 210 20 PA 215 PA 211 PA 210 10 PA 212 PA 211 PA 210 11 PA 209 OMD PA 208 17 PA 209 OMD PA 208 17 PA 209 OMD PA 208 18 PA 209 OMD PA 208 17 PA 207 PA 208 PA 208 18 PA 209 OMD PA 208 19 PA 115 PA 110 10 PA 115 PA 110 11 PA 110 OMD 14 PER 1 GMD PA 118 13 PA 115 PA 114 PA 113 11 PA 110 OMD 10 PA 107 PA 108 PA 108 10 PA 109 OMD PA 108 11 PA 109 OMD PA 108 12 PA 111 PA 110 13 PA 115 PA 114 PA 110 14 PER 1 GMD PA 108 15 PA 109 OMD PA 108 16 PA 109 OMD PA 108 17 PA 109 OMD PA 109 18 PA 101 PA 100 OMD PA 108 19 PA 101 PA 100 OMD PA 108 10 PA 018 PA 011 PA 010 10 PA 018 PA 011 PA 010 10 PA 010 PA 010 OMD PA 010	CN14 A S C SND GND SND SND 31 SWFLD BWVD SWND 31 SWFLD BWVD GND 32 GND BWVCK GND 29 BWY 7 BWY 8 SWY 2 25 BWY 4 BWY 3 BWY 2 27 BWY 1 BWY 6 GND 25 BWY 7 BWY 8 BWY 5 25 BWY 4 BWY 3 BWY 2 26 BWY 7 BWY 9 BWY 5 27 BWY 1 BWY 0 GND 28 BWY 1 BWY 0 GND 29 BWY 1 BWY 0 GND 21 BWY 1 BWY 0 GND 21 BWY 1 BWY 0 GND 22 BWY 1 BWY 0 GND 31 BWY 1 BWY 0 BWY 1 31 BWY 1 BWY 0 GND 31 BWY 1 BWY 0 BWY 1 31 BWY 1 BWY 0 BWY 1 31 BWY 1 BWY 0 GND 31 BWY 1 B		CN29 A 9 C GND GND GND GND 31 BWFLD BWYD BWWD 30 GND BWCK GND 31 GND BWCK GND 28 BWY 7 BWY 6 BWY 5 28 BWY 4 BWY 3 BWY 2 27 BWY 1 BWY 6 GND 28 BWY 7 BWY 6 GND 28 BWY 7 BWY 8 BWY 5 27 BWY 1 BWY 9 GND 28 BWY 4 BWY 3 BWY 5 28 BWY 4 BWY 9 GND 20 BWU 9 BWY 9 BWY 5 21 BWU 1 BWY 9 GND 22 BWU 1 BWY 9 GND 22 BWU 1 BWU 9 GND 22 BWU 1 BWU 9 GND 22 BWU 1 BWU 9 GND 26 GND 27 BWU 1 BWU 9 GND 28 BWU 1 BWU 9 GND 29 GND 30 GND 4 BW 9 GND 4 BW 9 GND 5 GND 5 GND 7 IN 4 GND 6 GND 6 GND 6 GND 7 IN 4 GND 7 IN 5 GND 7 IN 6 GND 7 IN 9 GND 8 GND 9 CPN V9
CNT C	31	8	CN16 A B C 32 +8V +8V +8V +8V 31 +8V +8V +5V 30 +8V +5V +5V +5V 20 +8V +5V +5V 21 -28 -27 -26 -25 -24 -22 -22 -22 -22 -22 -22 -22 -22 -22	CM19 A B C C S S S S S S S S S S S S S S S S S

MB-385 BOARD BOARD NO.1-644-603-11 DFS-500 DFS-500P

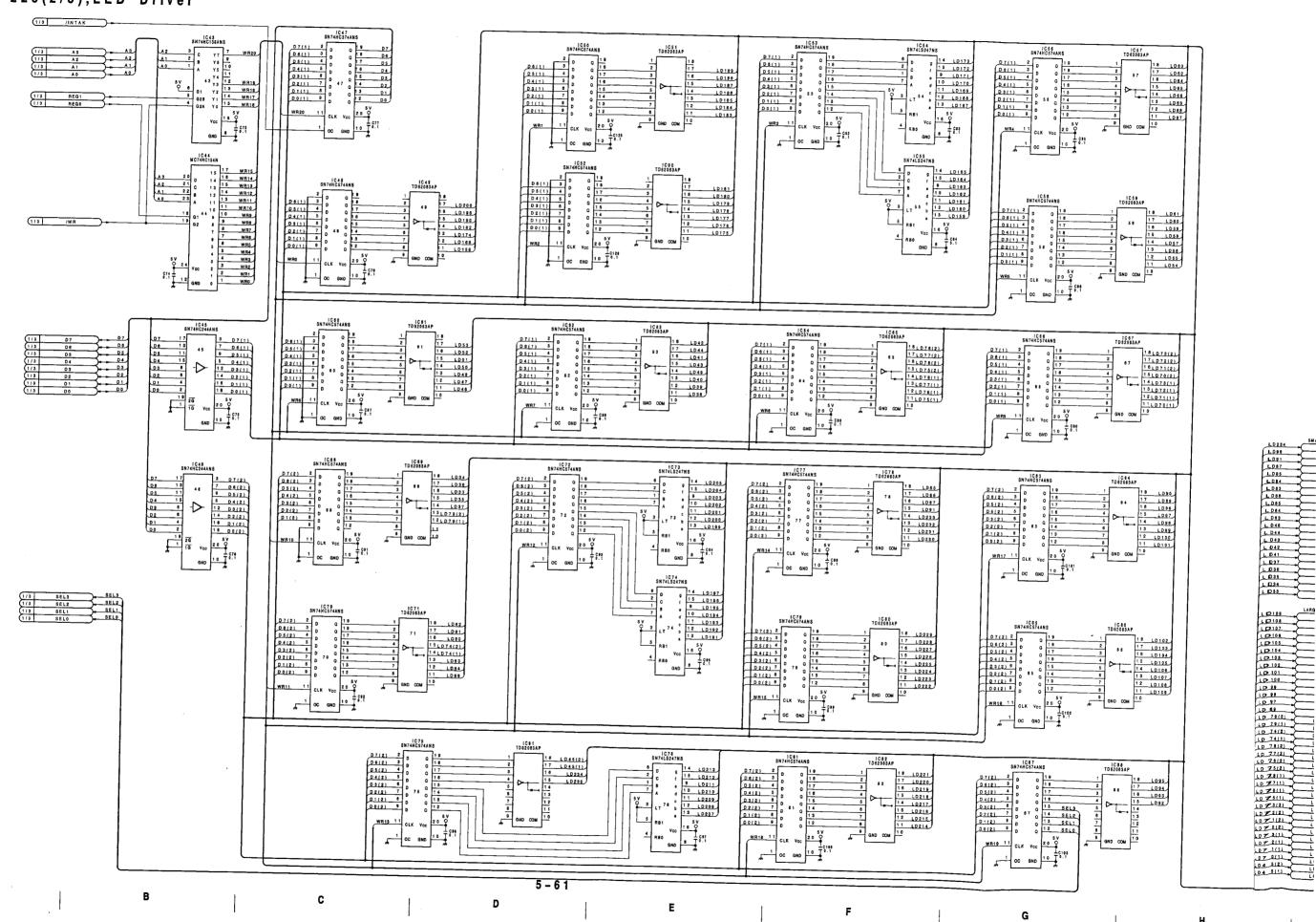
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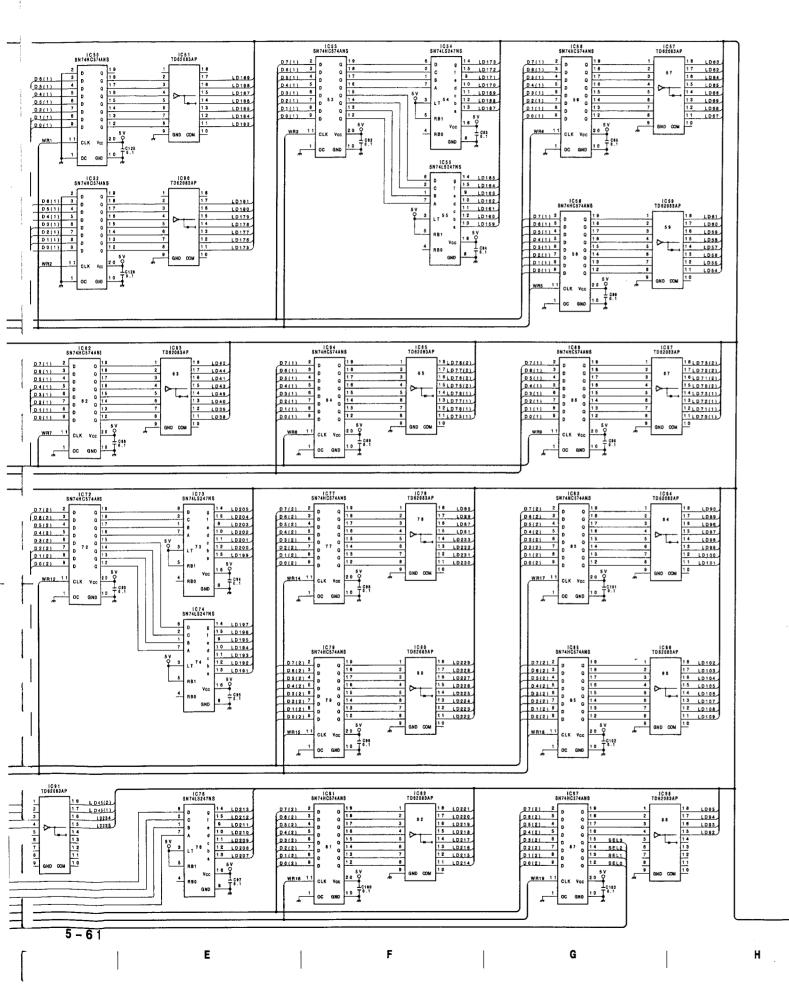
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KY-223(2/3); LED Driver



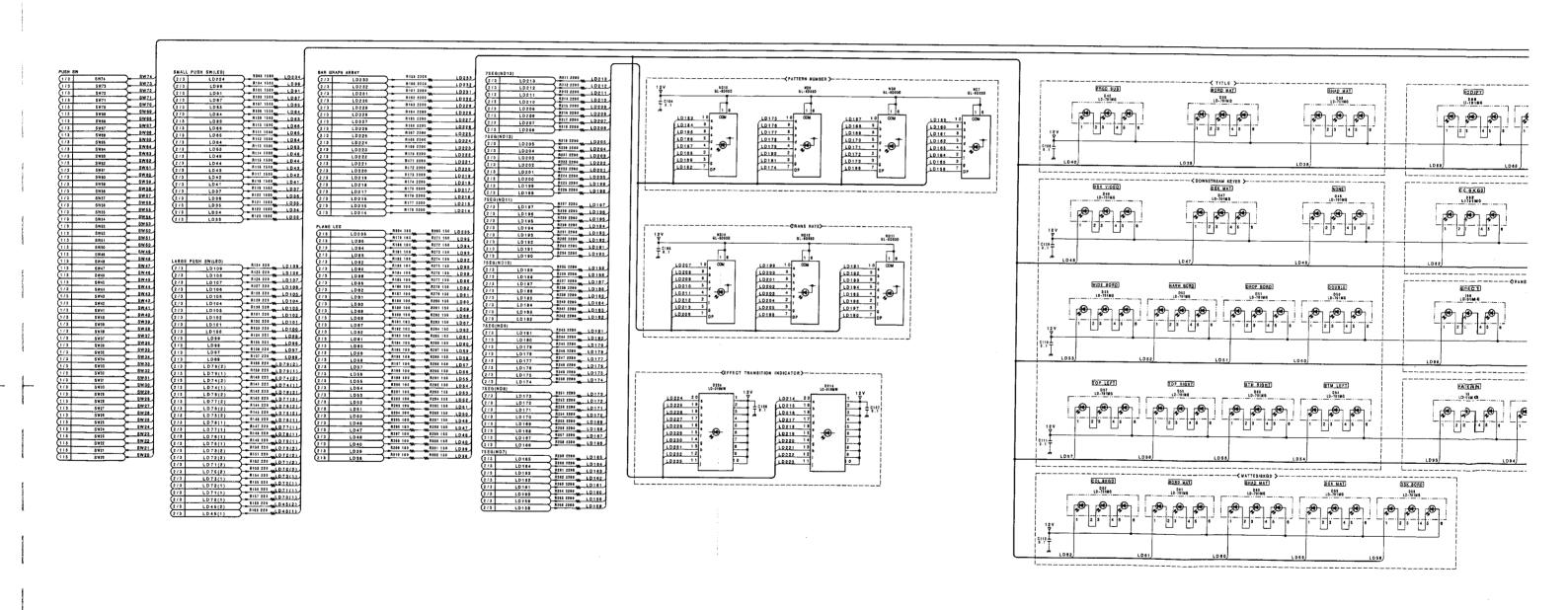


LD234 _/	SMALL PUSH SWILL										
LD96	LD234	3/3)									
	LD98	3/3)									
LD91	LD91	3/3)									
LD87	LD87	3/3)		AR GRAPH ARRAY							
LD85	LD85	3/3)	LD233	LD233	3/3)						
LD84}	LD84	3/3)	LD232	LD232	3/3						
LD83	LD83	3/3	LD231	LD231	3/3						
LD66	LDSs	3/3	LD230 >	LD230	3/3						
LD65	LD85	3/3	10229								
LD84			10228	LD229	3/3)						
LD83	1084	3/3)	LD227	LD228	3/3)						
LD49	LD63	3/3)	_	LD227	3/3)						
LD44 >	LD49	3/3)	LD226	LD228	3/3)						
	LD44	3/3)	LD225	L D 225	3/3)						
LD43	LD43	3/3)	LD224	LD224	3/3)						
LD42	LD42	3/3)	LD223	LD223	3/3)	78EG(N D 10)				
LD41	LD41	3/3)	LD222	LD222	3/3)		LD189 3/3)				
LD37	LD37	3/3)	LD221	LD221	3/3)		LD188 3/3)				
LD36	LD36	3/3)	LD220	LD220	3/3)		LD187 3/3)				
LD35	LD35	3/3	LD219	LD219	3/3						
LD34	LD34	3/3	LD218				LD188 3/3				
LD33			LD217	LD218	3/3)	10184	LD185 3/8				
	LD33	3/3	LD218	LD217	3/3	7	LD184 3/3)				
			LD215	LD218	3/3)	10100	LD183 3/3				
LD109	LARGE PUSH SW(LE		LD214	LD215	3 / 3	ERIEE	LD182 3/3)				
LD108 >	LD109	3/3)	-C	LD214	3/3)	1					
	LD108	3/3)				1					
LD107	LD107	3/3)	P	LANE LED		1					
LD108 -	LD106	3/3)	LD235	LD235	3/3)	7\$EQ(ND91	75	EG(ND13)		
LD105	LD105	3/3)	LDSS	LD95	3/3	LD181	LD181 3/3)	LD213	LD213	3/3	
LD104>	LD104	3/3)	LD84	LD94	3/3		LD180 3/3	LD212 >		_	
LD103	LD103	3/3)	LD83	LD93	3/3		LD179 3/3)	LD211	LD212	3/3	
LD102	LD102	3/3)	LD02	LD92	3/3)			LD210 >	LD211	3/3)	
LD101	LD101	13/3	LD90 -	LD90			LD178 3/3	LD209	LD210	3/3)	
LD100 >			LD88		3/3)	10470	LD177 3/3	LD208	LD208	3/3)	
LDee >	LD100	3/3	1.D80	LD88	3/3)	10176	LD176 3/3		LD 208	3/3)	
LD98	LD99	3/3	LD82		3/3)	1,5,77	LD175 3/3	LD207	LD207	3/3)	
LD97	LD98	3/3	LD81		3/3	J. 17	LD174 3/3)	LD208	LD208	3/3)	
	LD97	3/3)		LD81	3/3)			1 –			
LD89	LD89	3/3)	LD 80.	LD80	3/3)	1					
LD79(2) -	LD79(2)	3/3)	LDSS	LD89	3/3)	ì					
LD79(1) ->	LD79(1)	3/3)	LD68	L D 88	3/3)	78EG(NDSI	,,	EG (ND12)		
<u> ۲۰۲۹(۲) ک</u>	LD74(2)	3/3)	1087	LD87	3/3)		LD173 3/3)	LD205	LD205	T	
LD74(1)	LD74(1)	3/3	LD82		3/3		LD172 3/3)	LD204		3/3	
LD78(2)	LD78(2)	3/3	LD81	LD61	3/3			LD203	LD204	3/3	
LD77(2)	LD77(2)	3/3	LD00			10170		LD202	LD203	3/3)	
LD78(2)		13/3	LD59		3/3)	10100	D170 3/3	LD201	LD202	3/3)	
LD75(2)	LD78(2)		LD58	LD50	3/3)	10166	D189 3/3		LD201	3/3	
LD78(1)	LD75(2)	3/3)	LD57	LD58	3/3)	10,07	D188 3/3	LD200	LD200	3/3	
LD77(1) >	LD78(1)	3/3)			3/3)		D167 3/3)	LD199	LD199	3/3)	
	LD77(1)	3/3)	LD58	L D 5 6	3/3	LD166	D166 3/3)	LD198	LD198	3/3	
1078(1) ->	LD76(1)	3/3	LD55	LD55	3/3)	1		ı –			
LD75(1) ->	LD75(1)	3/3)	LD54	LD54	3/3)	I		ı			14
LD73(2)	LD73(2)	3/3)	LD53		3/3)	I		I			K
1072(2)	LD72(2)	3/3)	LD52	LD52	3/3	78EG(1	WD 71	1			•
LD71(2)	LD71(2)	3/3	LD51	LD51				LD197 78	EG(ND11)	_	В
LD70(2)	LD70(2)	13/3	LD50		3/3	10184	D165 3/3	LD198	LD197	3/3)	
LD73(1)			LD48		3/3)	10144	D184 3/3	LD 185	LD196	3/3	D
LD72(1)	LD78(1)	3/3)	1.047	LD48	3/3)	r	D163 3/3		LD195	3/3	D
LD71(1)	LD72(1)	3/3)	LD46		3/3)	10101	D162 3/3)	LD 194	LD194	3/3)	_
	LD71(1)	3/3)		LD48	3/3)		D161 3/3)	LD193	LD193	3/3)	
LD70(1) ->	LD70(1)	3/3	1040	LD40	3/3)	1.0180	D160 3/3)	10192	LD192	3/3	
LD45(2) -	LD45(2)	3/3	LDSS	L D 39	3/3)	10159	D159 3/3)	LD191	LD191	3/3)	
			LD38 _>				10/10	LD190 >		1213	
LD45(1) -	LD45(1)	3/3)		LD38	3 / 3 /		D158 979	20144	10100	1010	
1045(1)	LD45(1)	1313)		LD38	3/3)		D158 3/3	C	LD190	3/3	

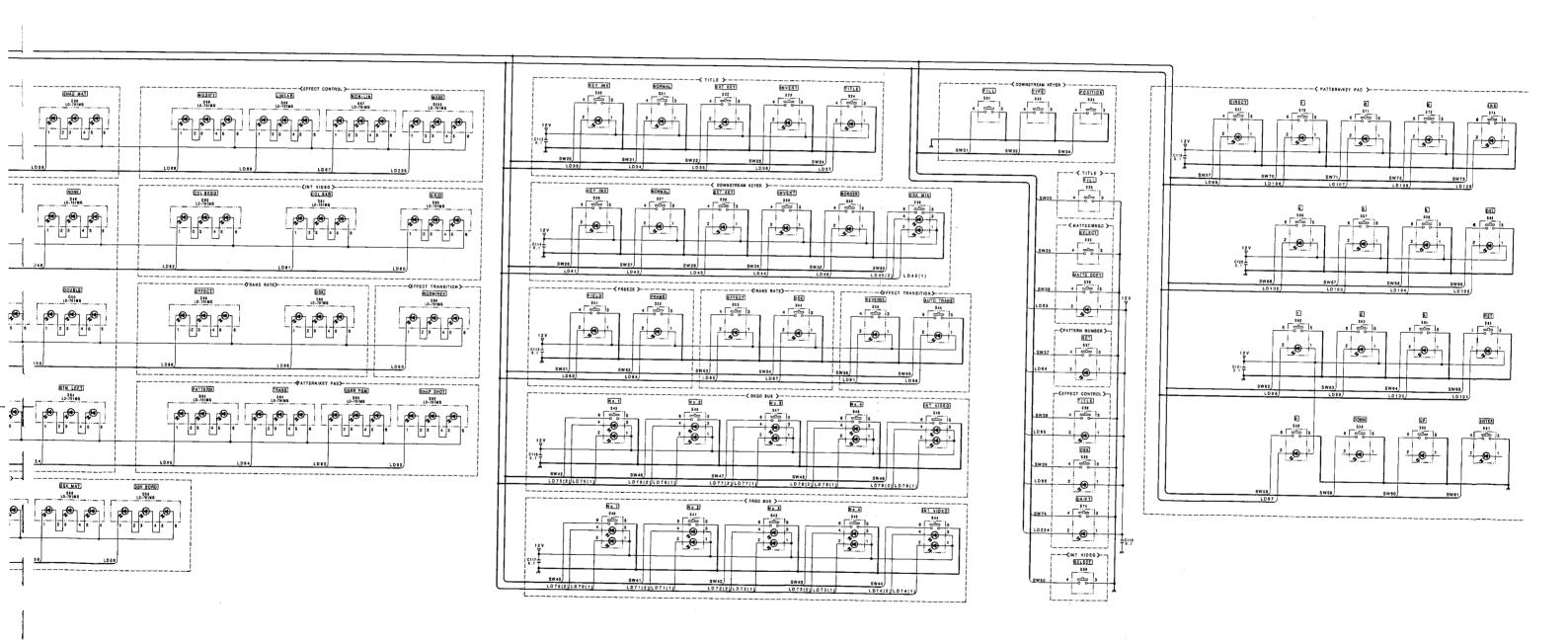
KY-223(2/3) BOAF
BOARD NO.1-644-604-11
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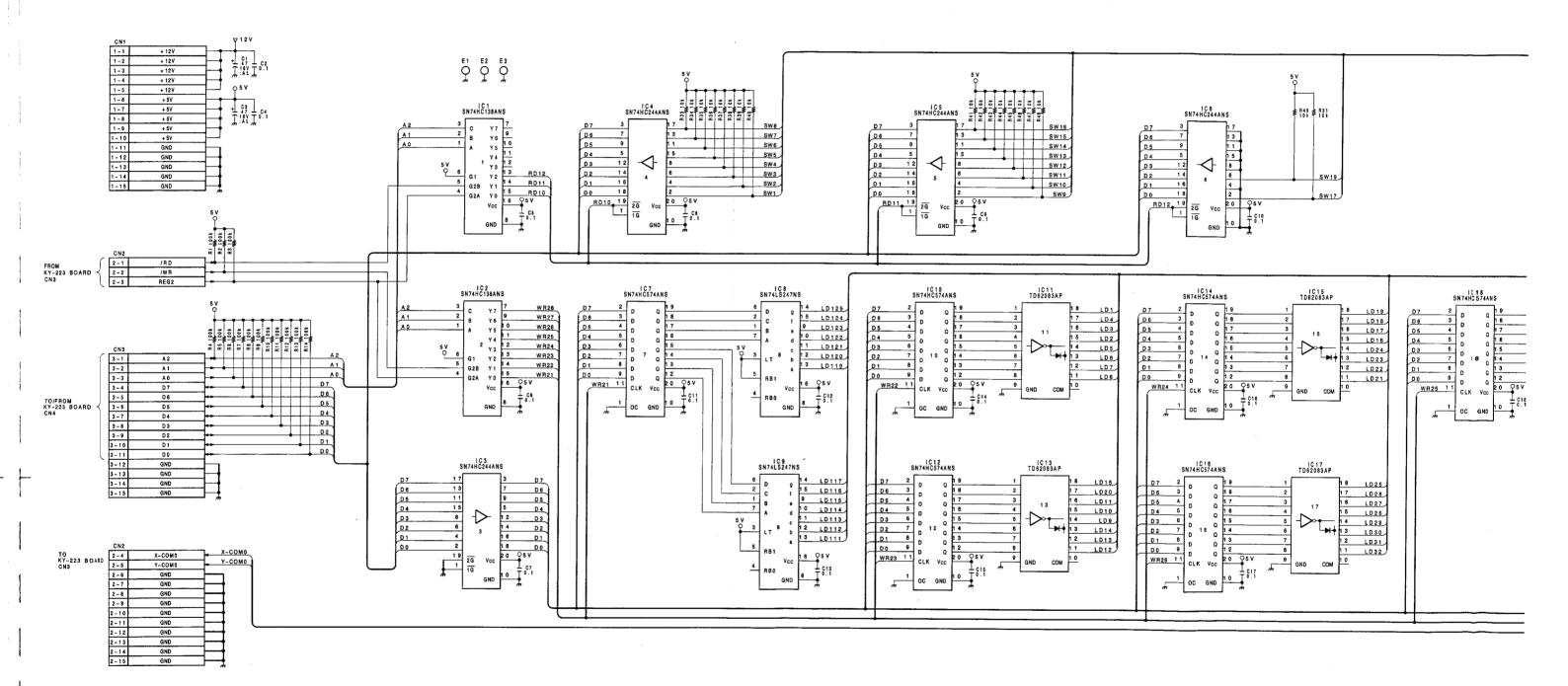
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KY-223(3/3) BOARD DFS-500 DFS-500P

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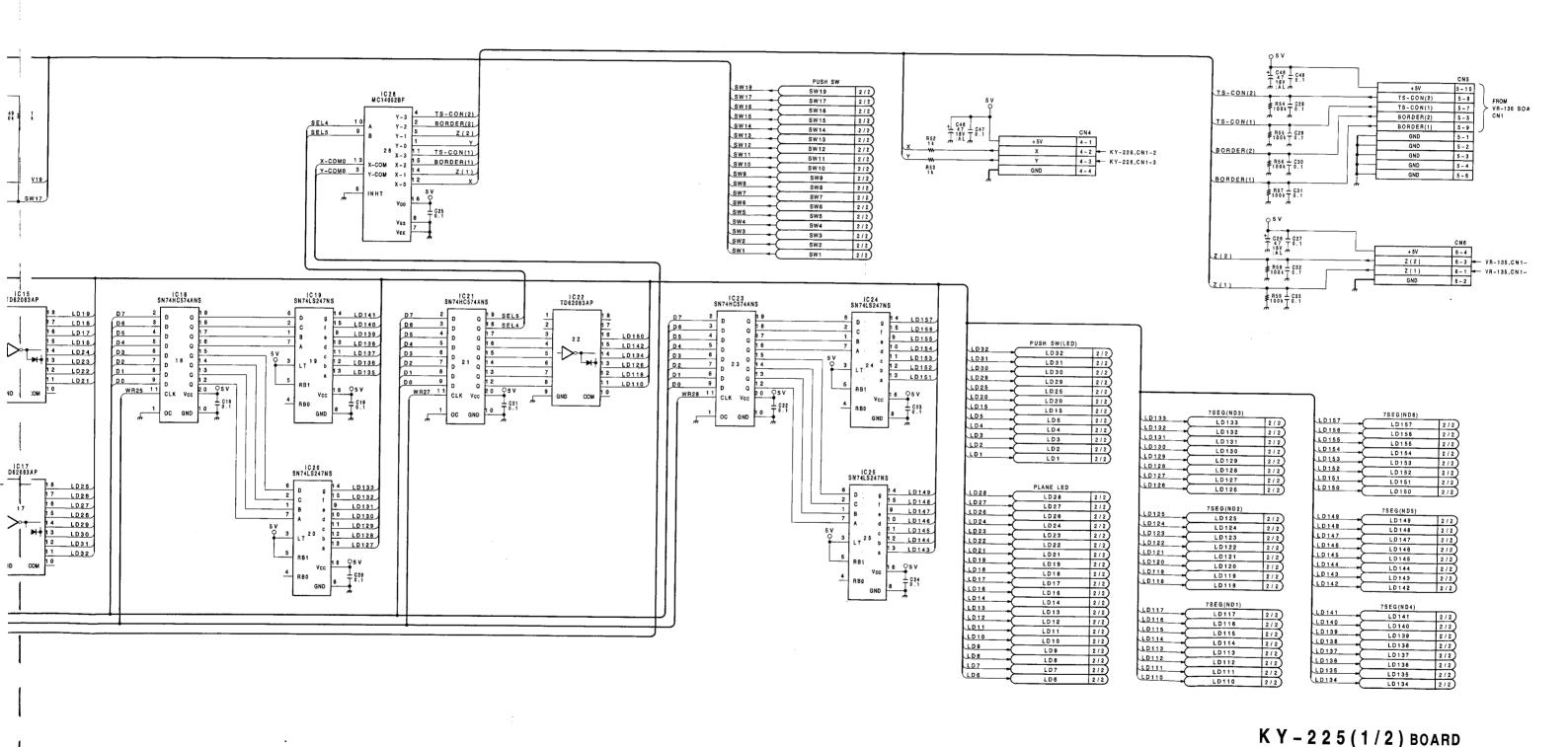
KY-225(1/2); LED Driver



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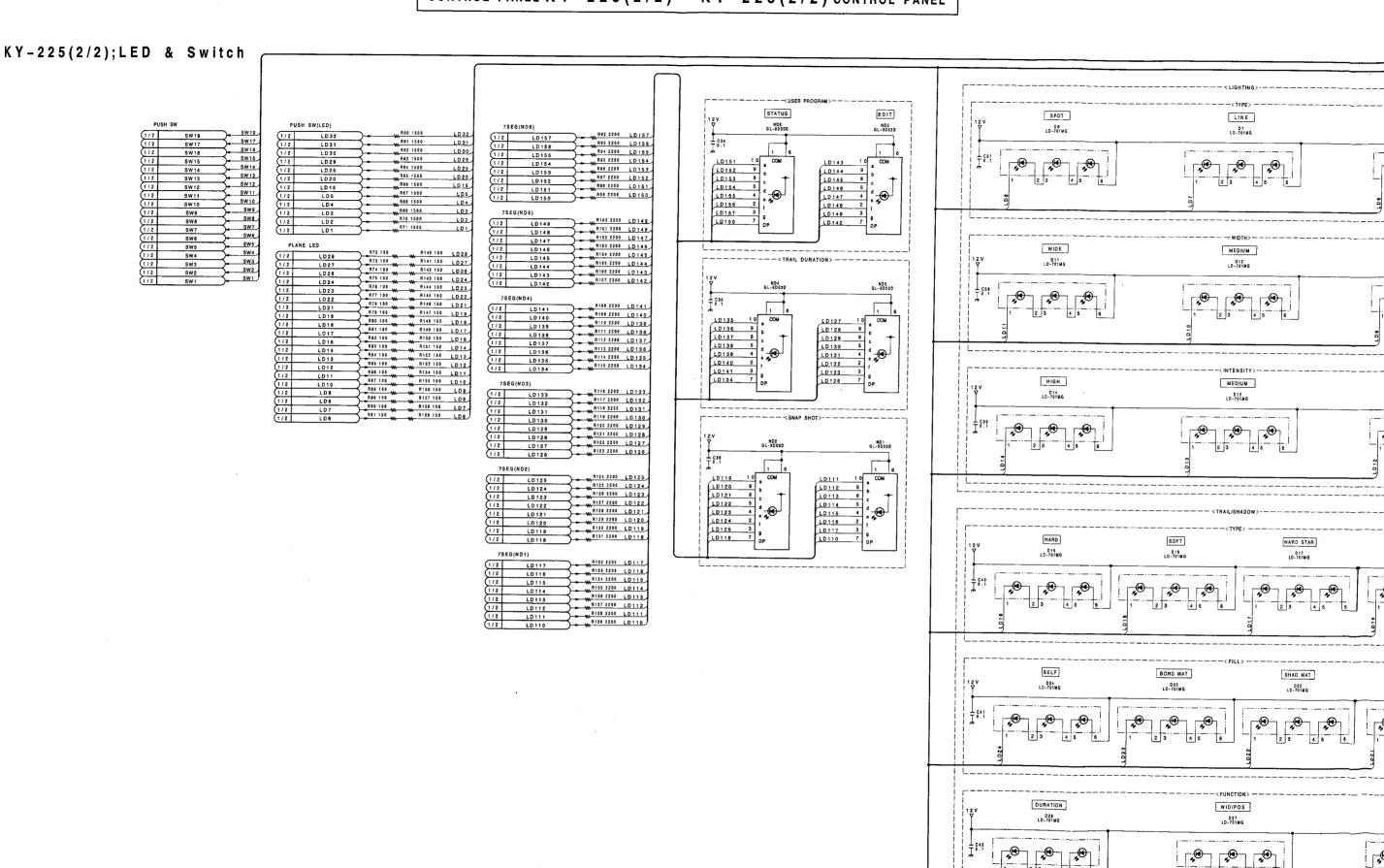
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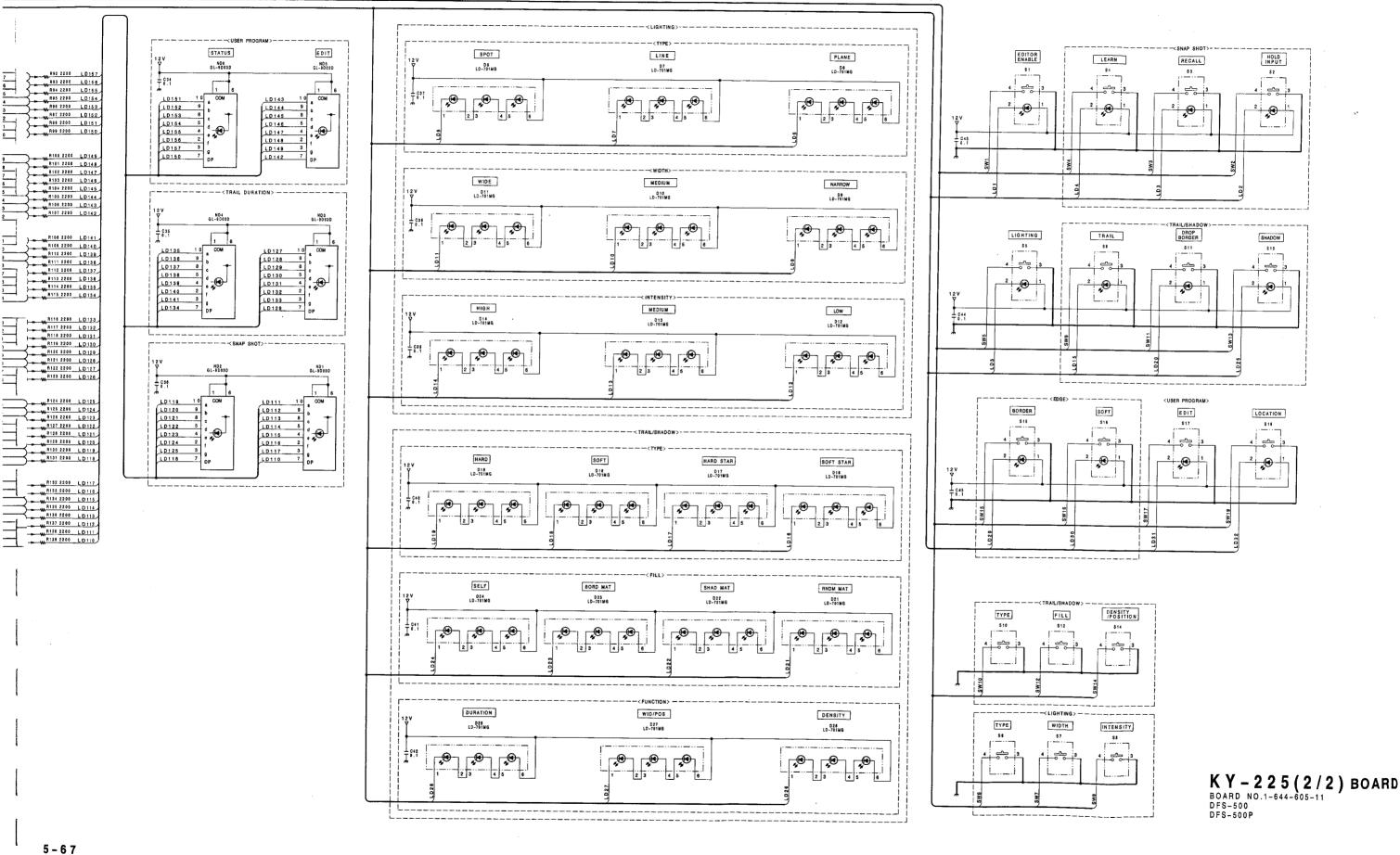
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IN 4 IN CN9(2/2) CN9(1/2) CN7(2/2) CN7(3/2)	CN12 CN13	CN14	CN15	CN16 (0) (0) (0) (0) (0) (0) (0) (0) (0) (0)	CN17 (0000) (0000) (0000)	CN18 (0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	CH38 (000) (000) (000) (000)	CN39 (0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
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DC FAN			·					2	OND COPP OND OND
BKDF-502/502P(OPTI ON)								C C C C C C C C C C C C C C C C C C C	GND COPS OUT 1 19
CM40 1 26 DK KEY 010 2 27 GND D9 4 29 GND D7 5 30 DK R D9 6 31 GND D7 7 32 DK R D9 8 34 +12V D1 10 35 +12V D1 11 36 +12V D1 11 36 +12V D1 11 3 -12V A7 11 3 -12V A8 11 4	CHSG	22 47 DKYO DKK2 24 48 GNO DKK1 25 49 BKY7 DKK0 25 50 DKV9 GNO 25 50 DKV9 GNO 25 50 DKV9 GNO 25 50 SO	29 MEY 7 MEY 6 26 MEY 4 MEY 3 27 MEY 7 MEY 6 28 MEY 7 MEY 6 25 MEY 7 MEY 7 25 MEY 7 MEY 7 25 MEY 7 MEY 7 26 MEY 7 MEY 7 27	118 MEK 1 MEK 3 118 MEK 1 MEK 1 119 MEK 1 MEK 1 110 BGV 7 BGV 6 111 BGV 1 BGV 0 112 BGV 1 BGV 0 113 BGV 1 BGV 0 114 BGV 1 BGV 0 115 BGV 1 BGU 0 116 BGU 1 BGU 0 117 BGU 1 BGU 0 118 BGU 1 BGU 0 119 BGU 1 BGU 0 110 BGU 1 BGU 0 110 BGU 1 BGU 0 111 BGU 0 112 BGU 1 BGU 0 113 BGU 1 BGU 0 114 BGU 1 BGU 0 115 BGU 1 BGU 0 117 BGU 0 118 BGU 1 BGU 0 119 BGU 1 BGU 0 110 BGU	CN2 A 112V 112V 112V 112V 112V 112V 112V 1	26 A 5 A 4 A 7 7 2 5 A 5 A 4 4 2 2 3 A 2 2 3 A 1 2 2 3 CORG 2 CORG 2 3 CORG 2 3 CORG 2	11 OPY 7 OPY 6 OPY 5 111 OPY 4 OPY 3 OPY 5 10 OPY 1 OPY 0 OPY 2 10 OPY 1 OPY 0 OPY 2 10 OPV 4 OPY 0 OPV 2 10 OPV 1 OPV 0 OPU 2 10 OPV 1 OPU 0 OPU 2 10 OPK 1 OPK 0 OPK 2 10 OPK 1 OPK 0 OPK 2	28 GND REFOUT 1 29 GND REFOUT 1 29 GND REFOUT 2 28 GND REFOUT 4 28 GND REFOUT 4 28 GND Y72 24 GND Y72 25 GND Y72 26 GND Y72 27 GND Y72 28 GND Y72 29 GND Y72 20 GND Y	Y-0 9-Y-0
OK KEY DIO 1 26 GND D9 2 2 2 DK G D9 3 2 2 OK D D7 4 29 OK B D4 2 3 OK B D4 5 30 OK B D4 6 30 OK B D4 6 30 OK B D4 7 32 OK B D7 1 38 OK B D4 7 32 OK B D7 1 38 OK B D7 1 38 OK B D7 1 1 42 OK B D7 1 1 43 OK B D7 1 1 42 OK B D7 1 1 43 OK B D7 1 1 1 44 OK	10 10 10 10 10 10 10 10	0KY0 DKK2 GND DKK1 DKK6 DKY6 GND CKY6 DKY6 CKY6 CKY6 CKY6 CKY6 CKY6 CKY6 CKY6 C	MEY 6 MEY 5 MEY 2 MEY 2 MEY 2 MEY 2 MEY 2 MEY 2 MEU 5 MEU	MEK 4 MEK 3 MEK 2 19 MEK 1 MEK 0 GNO 19 BGV 7 BGV 5 17 BGV 7 BGV 5 17 BGV 7 BGV 6 BGV 2 16 BGV 7 BGV 6 BGV 2 15 BGV 7 BGV 6 BGV 2 13 BGV 7 BGV 6 BGV 2 13 BGV 1 BGV 0 BGV 2 13 BGU 7 BGU 6 BGU 2 10 BGU 1 BGU 0 BGU 2 10 BGU 1 BGU 0 GNO 10 BGU 1 BGU 0 GNO 0 BGU 1 BGU	+12V +12V 2 +12V +12V 2 +12V +12V 2 +12V 2 -12V 2 -12V 3 -12V 3	A 4 A 3 26 A 4 A 3 26 A 1 GND 24 ORG 2 OPT 1 22 OPT 2 OPT 1 22 OND 21 RVD RND 19 RCK GND 19 17 OND 15 16 OND 19 17 OND 19 18 OND 19 18 OND 19 18 OND 19	OPY 7 OPY 6 OPY 5 12 OPY 4 OPY 3 OPY 2 11 OPY 1 OPY 6 OPY 1 10 OPV 7 OPY 6 OPY 2 0 OPV 1 OPY 0 OPY 2 0 OPV 1 OPY 0 OPY 2 0 OPV 1 OPY 0 OPY 2 6 OPV 1 OPY 0 OPY 2 6 OPV 1 OPY 0 OPY 2 6 OPV 1 OPY 0 OPY 2 5 OPV 1 OPY 0 OPY 2 5	C C C REFOUT 1 32 REFOUT 2 31 REFOUT 2 21 X Y Y 2 2 4 X Y Z 2 4 X Y Z 2 2 4 X Y Z 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	GND COPS OUT 19

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B C	N N N N N N N N N N	
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CAN	12 23 4597	
SHO REFOUT 1	AWY AWY	RAME WIRING('
	AD-76 BOARD	

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BKDF-501/501P(OPTI ON)		VE-25 BOARD		
BROF-SOTT SOTE (OF TOW)		VL-23 BOARD	1	
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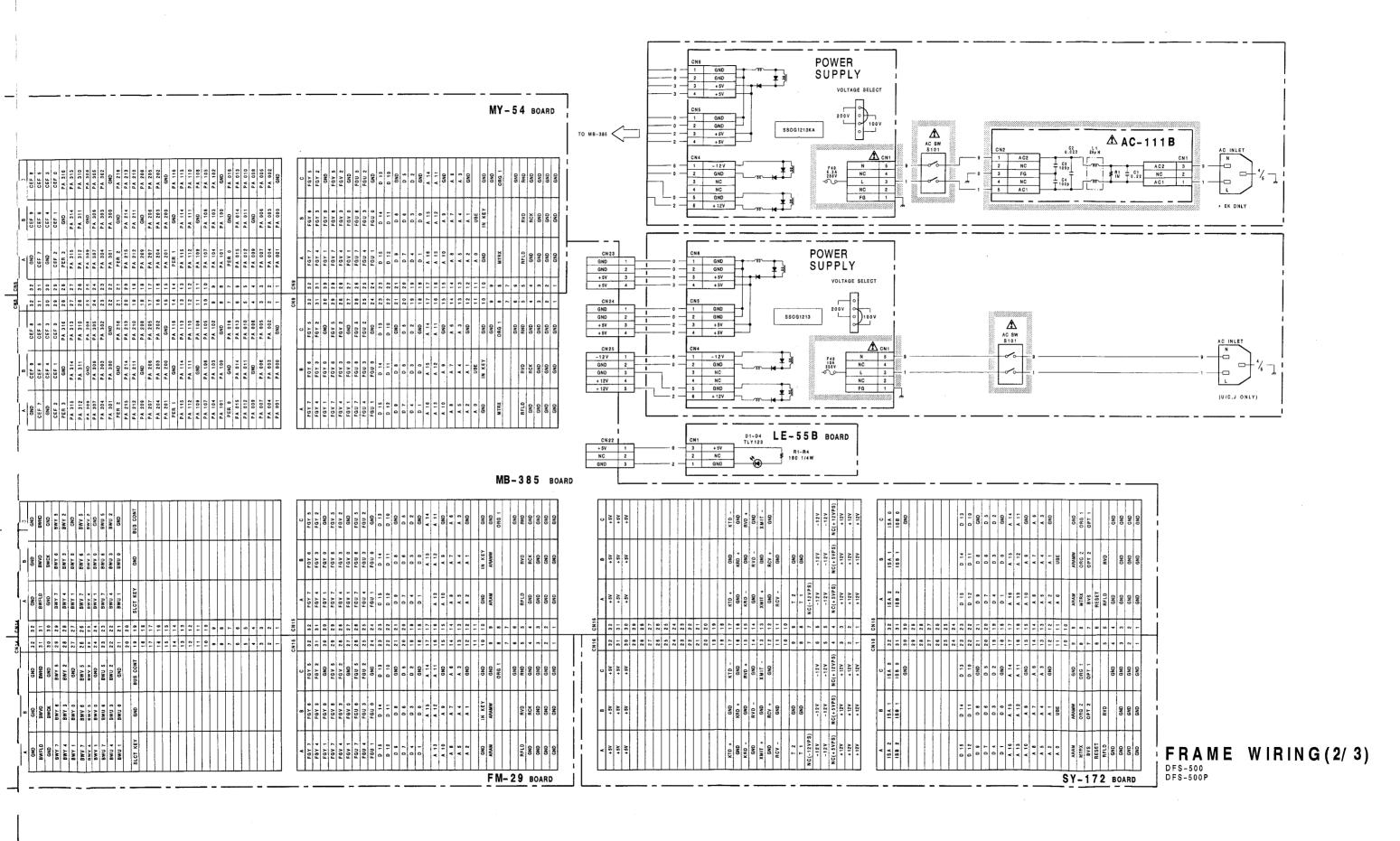
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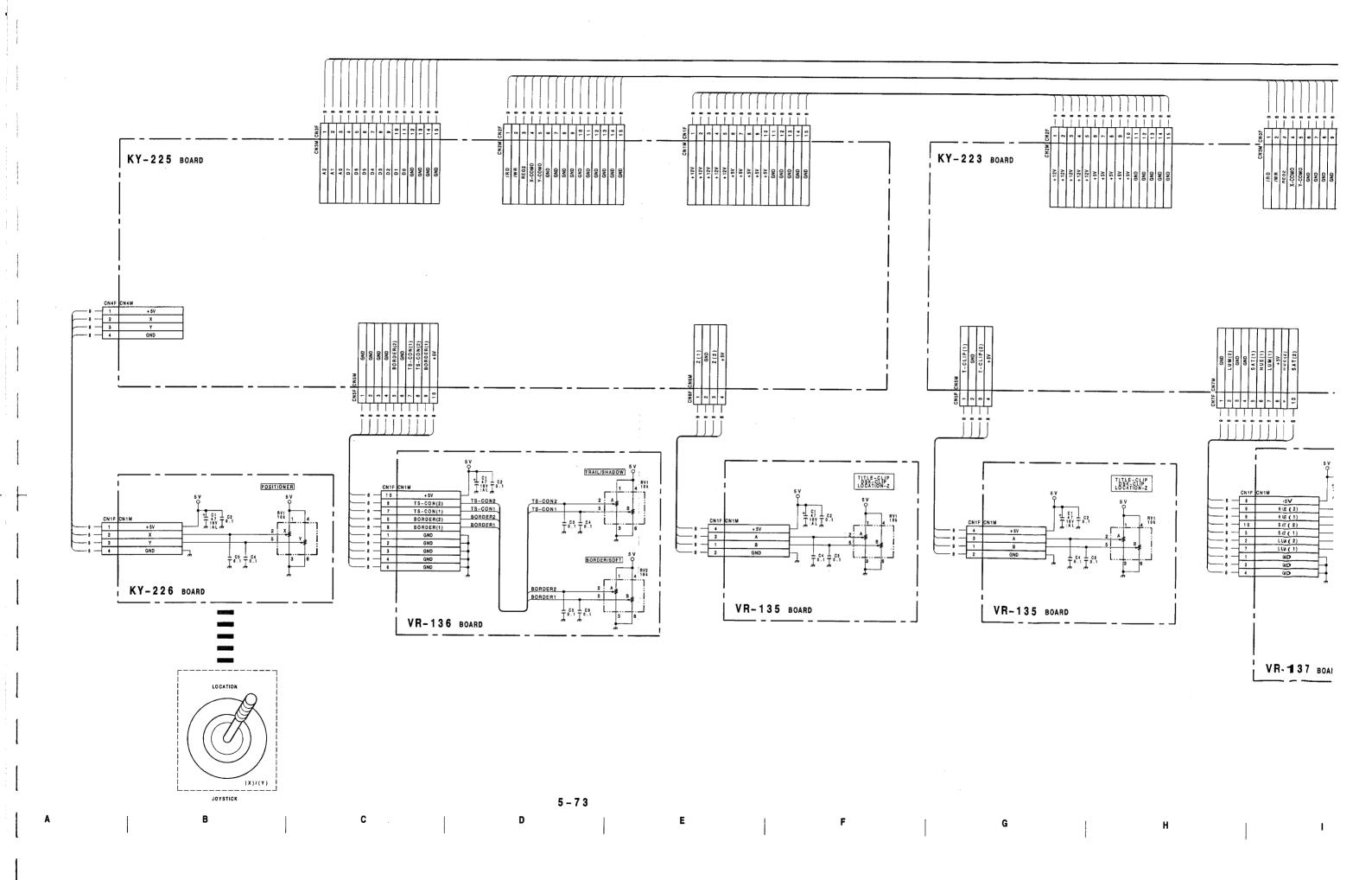
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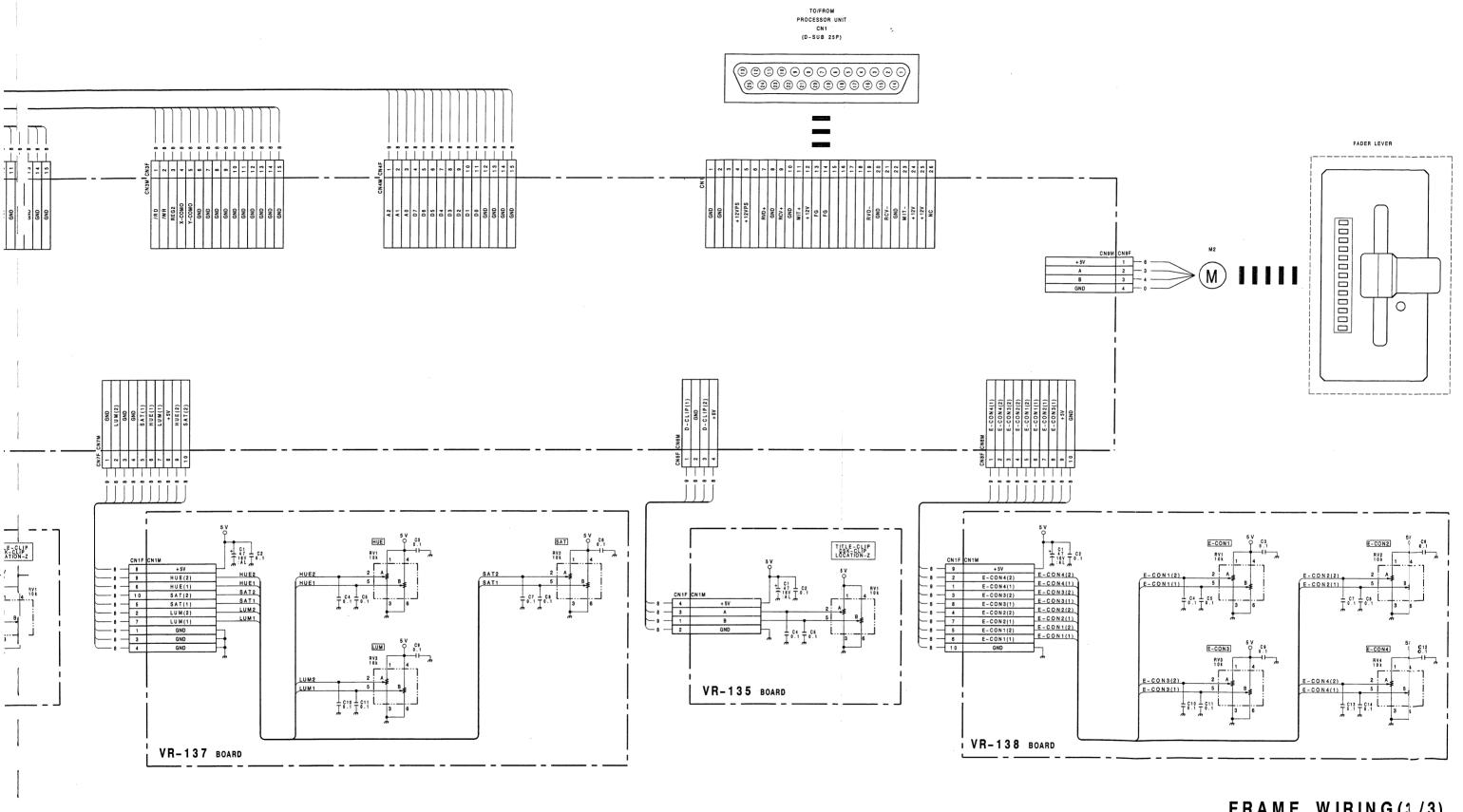


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CONTROL PANEL FRAME WIRING(3/3) FRAME WIRING(3/3) CONTROL PANEL



FRAME WIRING (3/3)
DFS-500P

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SECTION 6 BOARD LAYOUTS

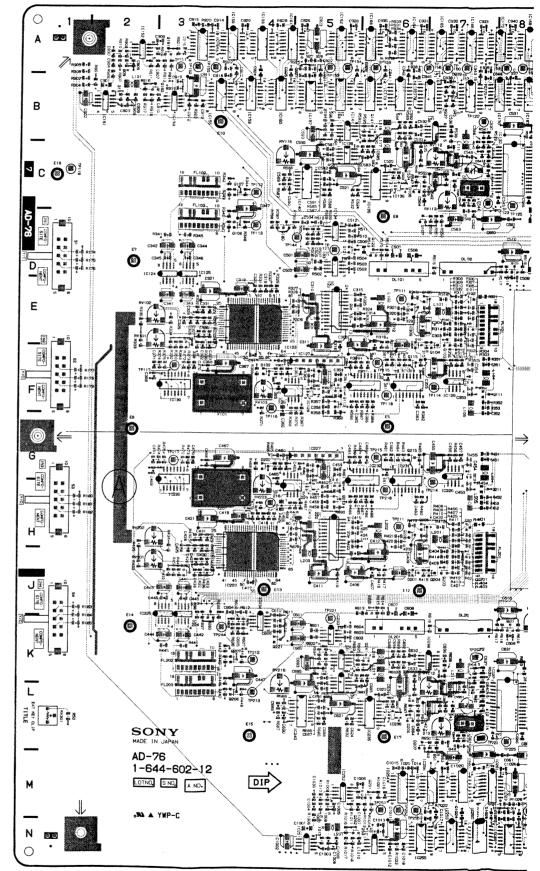
	Board	Function	Pag
Α	AC-111(For EK)	Line Filter····	· 6 – 2
	A D - 76	A/D Converter	6 - 2
С	CN-573	Rear Panel Connector·····	6 – 1
D	D A - 63	D/A Converter·····	6 - 1
F	FM-29	Frame Synchronizer·····	6 – 4
K	KY-223	Function Key····	
	KY-225	Switch	
	KY-226	Positioner	6 – 2 1
L	LE-55	Power Indicator	6 - 2 1
M	M B - 385	Mother Board······	6 – 16
	M Y - 5 4	Field Memory·····	6 - 6
Р	PU-78	Address Operation ·····	6 – 8
s	SY-172	System Control	6 – 12
٧	V R - 135	Location Control ·······	6 – 2 1
		Title Control	
		DSK(Down Stream Keyer) Control	
	V R - 136	Edge/Trail/Shadow Control	
	V R – 137	Mattes/BKGD Control	6 - 21
	VR-138	Effect Control	6 - 2 1

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6 - 1

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AD-76	(1-644-)	602-12)													
CN 19	C – 1 5	FL101	E – 8	I C 1 4 3	C-12	1 C 2 2 8	H – 5	Q102	E – 7	Q215	G – 6	R V 116	C – 4	TP155	A – 3
CN 20	G – 15	FL102	C – 3	IC144	B – 12	IC229	H – 5	Q103	F – 7	Q 2 2 1	K – 4	RV117	D – 10	TP156	A - 7
CN 21	L – 15	FL103	C – 3	IC145	E - 13	IC230	H – 3	Q104	F – 7	Q 2 2 2	J - 6	R V 1 1 8	C-11	TP157	B – 7
01/4.04		FL111	D – 9	IC146	D-13	IC231	G – 6	Q 1 0 5	E - 7	Q 2 2 3	K – 8	R V 1 1 9	B – 11	TP158	A – 8
CV101 CV201	C – 7 L – 7	FL112 FL113	C ~ 9 D ~ 9	I C 1 4 7 I C 1 4 8	C – 13 D – 13	1 C 2 3 2 1 C 2 3 3	G – 6 K – 5	Q 1 0 6 Q 1 0 7	E – 6 C – 4	Q 2 2 4 Q 2 2 5	K – 9 K – 9	R V 121 R V 122	D-12	TP159	A - 6
01201	L - /	FL114	C-10	IC149	C-14	1C234	J – 4	Q107	D – 4	Q 2 3 1	L – 9	R V 122	C – 12 B – 12	TP160 TP161	A – 7 A – 8
DL101	E – 6	FL115	B – 10	IC150	C-13	©IC235	L – 6	Q111	F – 7	Q 2 3 2	L - 9	R V 123	B – 8	TP162	A – 8
DL102	D – 7	F L 2 0 1	J – 8	IC151	B - 2	©1 C 2 3 6	L - 6	Q112	F – 7	Q 2 3 3	L – 10	R V 2 0 1	J - 2	TP163	A – 9
DL103	D – 10	FL202	K – 3	IC152	A – 2	10237	K – 8	Q113	F – 5	Q 2 3 4	L - 10	R V 2 0 2	H – 2	TP164	B – 1 0
DL201 DL202	K – 6 J – 7	F L 2 0 3 F L 2 1 1	L – 3 L – 9	I C 1 5 3 I C 1 5 4	B – 3 A – 3	1 C 2 3 8 1 C 2 3 9	K – 7 L – 5	Q 1 1 4 Q 1 1 5	F – 5 F – 6	Q 2 3 5	M – 10	R V 2 0 3	H – 4	TP165	B – 1 0
DL202	S = 7 K = 10	FL211	K – 9	IC155	B – 3	1C239	L - 5	Q113 Q121	D – 5	Q 2 3 6 Q 2 3 7	L – 1 0 K – 9	R V 211 R V 212	J – 8 K – 7	TP201 TP202	G – 10 G – 10
		FL213	J – 9	IC156	A – 4	I C 2 4 1	K – 5	Q122	D - 6	Q238	L - 9	R V 2 1 3	L - 7	TP203	G-10
D101	E – 6	FL214	L – 10	IC157	B – 5	IC242	K – 11	Q123	D – 8	Q239	K – 10	R V 2 1 4	L-10	TP204	H – 1 0
D102	F - 4	F L 2 1 5	K – 10	IC158	A – 4	IC243	L – 12	Q124	E – 9	Q 2 4 0	L – 10	R V 2 1 5	K – 10	TP205	H – 1 0
D103	E – 3 C – 6	I C 1	۸ ۱۵	IC159 IC160	B – 4 B – 4	IC 2 4 4	L – 12	Q125	E - 9	Q 2 4 1	K – 6	R V 2 1 6	K – 4	TP206	H – 1 0
D106 D107	D - 6	1 C 1	A – 13 A – 12	IC160	Б – 4 A – 4	1 C 2 4 5 1 C 2 4 6	K – 13 M – 13	Q 1 3 1 Q 1 3 2	C – 9 C – 9	Q 2 5 1 Q 2 5 2	K – 1 0 K – 1 0	R V 2 1 7 R V 2 1 8	J – 1 1 L – 1 1	TP211 TP212	H – 6 K – 4
D111	D - 12	I C 3	A - 12	IC162	A - 5	IC 2 4 7	K – 13	Q132	D – 1 0	Q 2 5 3	J – 11	R V 2 1 9	K – 11	TP212	L – 4
D112	D - 12	I C 4	A – 11	IC163	B - 5	IC248	J – 13	Q134	C-10	Q 2 5 4	J – 11	R V 2 2 1	J – 12	TP214	L . H – 7
D113	C – 12	IC101	F – 13	IC164	A – 6	IC249	L – 13	Q135	D – 10	Q 2 5 5	L – 11	R V 2 2 2	L – 1 2	TP215	G – 6
D121	A – 8	IC102	F-11	IC165	A - 7	IC 2 5 0	K – 14	Q136	C - 9	Q 2 5 6	M – 11	R V 2 2 3	K – 12	TP216	H – 4
D122 D123	B – 9 A – 1 0	IC103 IC104	F – 13 F – 11	I C 1 6 6 I C 1 6 7	A – 7 B – 8	IC251 IC252	N – 5 M – 5	Q 137 Q 138	B – 9 C – 1 0	Q 2 5 7 Q 2 5 8	M – 1 1 K – 1 1	R V 2 3 1 R V 3 0 1	N – 1 1 L – 1	TP217 TP218	G – 3 H – 6
D124	A – 9	IC105	F-13	IC168	A – 6	IC 2 5 3	N – 6	Q 139	C-10	Q 2 5 9	L-11	R V 301	H – 13	TP218	н – 6 J – 5
D125	A – 10	IC106	F-11	IC169	A – 8	IC254	M – 6	Q 140	C-10	Q 2 6 0	L-11			TP222	K – 7
D126	A – 10	IC107	E – 13	IC170	B – 8	IC255	N – 7	Q141	B - 6	Q 2 7 1	J – 12	S 1	D – 1	TP223	L – 8
D201	J – 6	IC108	E-11	IC171	A – 7	IC256	M – 7	Q151	D – 10	Q 2 7 2	J – 12	S 2	F – 1	TP224	L – 8
D202 D203	G – 4 J – 3	IC109 IC110	E – 13 E – 11	IC172 IC173	A – 8 B – 6	1 C 2 5 7 1 C 2 5 8	N – 8 M – 7	Q 152 Q 153	D – 1 0 E – 1 1	Q 2 7 3 Q 2 7 4	J – 12 L – 12	S 3 S 4	H – 1	TP225	L – 8
D206	L – 6	IC111	E-13	IC174	B - 6	IC 2 5 9	M – 7	Q 153	D-11	Q 2 7 4 Q 2 7 5	L - 12 L - 12	3 4	J – 1	TP231 TP232	J – 11 L – 11
D207	L - 6	IC112	E - 11	IC175	B - 7	IC260	M – 7	Q155	C-11	Q276	L - 12	TP101	F – 10	TP233	K-11
D211	K – 12	IC113	J – 10	IC176	A - 9	IC261	M – 8	Q156	D – 1 1	Q277	K – 12	TP102	F-10	TP241	J – 12
D212	M – 12	IC114	H – 9	IC177	A – 9	IC262	M – 8	Q 157	D-11	Q 2 7 8	K – 12	TP103	F - 10	TP242	L – 12
D213 D221	L – 1 2 M – 1 1	IC115 IC116	H – 9 G – 9	IC178 IC179	B – 1 0 A – 1 0	1 C 2 6 3 1 C 2 6 4	M – 8 M – 9	Q 158 Q 159	C-11 C-11	Q 2 7 9	K – 12 K – 3	TP104	E-10	TP243	K – 13
D221	N – 13	IC117	G – 9	IC201	F-13	IC 2 6 5	M – 10	Q160	C-11	Q 2 8 0 Q 2 9 1	M – 6	TP105 TP106	E – 1 0 E – 1 0	TP244 TP251	K – 4 M – 6
D223	M – 13	IC118	F – 9	I C 2 0 2	G – 11	IC266	M – 10	Q171	D – 12	Q292	M – 6	TP111	E - 6	TP252	M – 6
D 2 2 4	M – 13	IC119	E – 9	IC203	G – 13	IC267	N – 1 1	Q172	D – 12	Q 2 9 3	M – 13	TP112	C – 4	TP253	M – 8
D225	M – 13	IC120	E - 9	IC204	G – 11	IC 2 6 8	M – 9	Q173	D - 12	Q 3 0 1	J – 14	TP113	D – 4	TP254	M – 8
D226 D301	M – 13 J – 13	IC121 IC122	F – 8 E – 5	1 C 2 0 5 1 C 2 0 6	G – 13 G – 11	I C 2 6 9 I C 2 7 0	M – 1 1 N – 1 1	Q 174 Q 175	C – 1 2 C – 1 2	Q302 Q303	H – 1 4 J – 1 3	TP114	F – 7	TP255	M – 6
D301	0-10	IC123	F – 4	1C207	G-13	IC270	N – 9	Q175 Q176	C-12	Q303 Q304	J – 13 J – 13	TP115 TP116	F – 6 G – 4	TP256 TP257	M – 1 0 M – 1 0
E1	E – 9	IC124	D – 2	IC208	G-11	IC272	M - 10	Q177	B – 12	Q305	J – 13	TP117	F - 2	TP258	M – 1 1
E 2	J – 10	IC125	D - 3	IC209	H – 13	IC273	M – 9	Q178	B – 12	Q306	H – 13	TP118	F - 6	TP259	M – 9
E 3	H – 8	IC126	F - 7	IC210	H-11	IC274	M – 9	Q 179	B – 12	Q307	J – 12	TP119	C – 1	TP260	M – 10
E 4 E 5	G – 1 4 F – 6	IC127 IC128	F – 5 F – 5	I C 2 1 1 I C 2 1 2	H – 13 H – 11	1 C 2 7 5 1 C 2 7 6	N – 1 0 M – 1 2	Q 180 Q 191	D – 4 A – 3	D D 1	D 14	TP121	D - 5	TP261	M – 11
E 6	G – 2	IC128	F – 4	IC212	J - 9	1C276	M - 12	Q 191	B – 3	RB1 RB2	D – 1 4 C – 1 4	TP122 TP123	B – 7 D – 8	TP262 TP263	M – 12 M – 13
E 7	D – 2	IC130	F - 3	IC214	H – 9	IC278	N - 1 4	Q193	A – 10	RB3	C-14	TP124	C - 8	TP264	N - 13
E 8	D – 6	IC131	F – 6	IC215	H – 9	IC279	M – 14	Q 201	J – 7	RB101	K – 14	TP125	D – 8	TP265	N – 13
E 9	C-13	IC132	F – 6	IC216	G – 9	IC301	J – 12	Q 202	H – 7	RB102	L – 14	TP131	D – 1 1	TP301	H – 1 4
E10 E11	B – 3 B – 8	IC133 IC134	D – 5 D – 5	I C 2 1 7 I C 2 1 8	G – 9 F – 9	IC302	J – 11	Q 2 0 3	J – 7	RB103	K – 14	TP132	C-11	TP302	J – 13
E12	J – 6	©IC135	C-6	IC218	E – 9	LV101	B – 10	Q 2 0 4 Q 2 0 5	J – 7 H – 7	R V 1 0 1	E – 2	TP133 TP141	B – 11 D – 13	TP303	H – 12
E13	J – 4	©IC136	C – 6	1 C 2 2 0	E – 9	LV201	N - 13	Q 20 6	H – 6	R V 101	E – 2	TP141	D-13 C-12	X 1 0 1	G – 4
E14	K – 2	IC137	B – 8	IC222	H – 5			Q 207	K – 4	R V 1 0 3	F – 4	TP143	B - 12	X 1 0 2	C - 7
E15	L – 4	IC138	B – 7	1 C 2 2 3	J – 4	PS1	B – 14	Q 208	L – 4	R V 1 1 1	D – 8	TP144	D – 4	X 2 0 1	H – 4
E16	L – 13	IC139	C - 5	1 C 2 2 4	K – 3	PS2	B – 14	Q 211	H-8	R V 1 1 2	C-7	TP151	A – 3	X 2 0 2	L - 7
E17 E18	L – 6 M – 9	IC140 IC141	C – 5 B – 5	1 C 2 2 5 1 C 2 2 6	J – 2 H – 7	PS3	E – 14	Q 212 Q 213	G – 7 H – 5	R V 113 R V 114	C – 7 C – 10	TP152 TP153	A – 3 A – 5	⊚:EK 0	NI V
E19	C – 1	IC142	D - 12	1C227	G – 5	Q101	E - 7	Q 2 1 4	H-5	RV114	B – 10	TP153	A – 5	⊎.⊑ n U	NLI
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AD-76:A/D Converter

RV116 C-4

RV122 C-12

RV123 B-12

RV131 B-8

RV201 J-2

RV202 H-2

RV203 H-4

RV211 J-8

RV212 K-7

RV213 L-7

RV214 L-10

RV215 K-10

RV216 K-4

RV217 J-11

RV218 L-11

RV221 J-12

RV222 L-12

RV231 N-11

RV301 L-1 RV302 H-13

TP101 F-10 TP102 F-10

TP104 E-10

TP105 F-10 TP106

TP111 E-6

TP112 C-4

TP113 D-4

TP115 F-6

TP116 G-4

TP117 F-2

TP118 F-6

TP119 C-1

TP121 D-5 TP122 B-7

TP123 D-8 TP124 C-8

TP125 D-8 TP131 D-11

TP132 C-11

TP133 B-11

TP141 D-13

TP142 C-12

TP143 B-12

TP144 D-4

TP151 A-3

TP152 A-3

TP153 A-5

TP154 A-5

K-11

F - 1

H – 1

J – 1

F - 10

E-10

F – 7

R V 2 1 9

R V 2 2 3

S 3

S 4

TP103

TP114

D - 10

C-11

B-11

D - 12

R V 1 1 7

RV118

RV119

R V 1 2 1

G-6

K - 4

K - 9

1 - 9

L-10

L-10

M-10

L-10

K-10

L-10

K-10

J-11

J = 1.1

L-11

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K-11

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K-12

K-12

K-3

M-6

M-6

M-13

J-14

H-14

J-13

J-13

H-13

J-12

D-14

C-14

C-14

K-14

L-14

K-14

E-2

E-2

C-7

C-7

C-10

B-10

K - 6

K - 9 L - 9

0215

Q 2 2 1

0222

Q 2 2 3 Q 2 2 4

Q225

Q 2 3 1

Q232

Q233

Q 2 3 4

Q235

Q236

Q237

Q238

Q239

Q240

Q 2 4 1

Q 2 5 1

Q252

Q253

Q 2 5 4

Q255

Q 2 5 6

Q257

Q 2 5 8

Q259

Q260

Q271

Q272

Q273

Q274 Q275

Q276

0277

Q278

0279

Q280

Q291

Q292

Q293

Q301

Q302

Q303

Q305

Q306

Q307

RB1

RB2

RB3

RB101

RB102

RB103

RV101

R V 102

RV103 RV111

RV112

RV113

RV114

R V 115

TP155

TP156

TP157

TP158

TP159

TP161

TP162

TP163

TP165

TP201

TP202

TP203

TP204

TP205

TP206

TP211

TP212

TP213

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TP231

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TP254

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TP258

TP259

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TP261

TP262

TP263

TP265

TP301

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X 1 0 2

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⊚:EK ONLY

TP303

TP264

TP253

TP215 G-6

TP224 L-8

B - 7

A - 6

A – 8

A – 8

K – 4

H – 4

G - 3

J – 5

K – 7

L - 8

L – 8

M-6

M-6

M - 8

M - 8

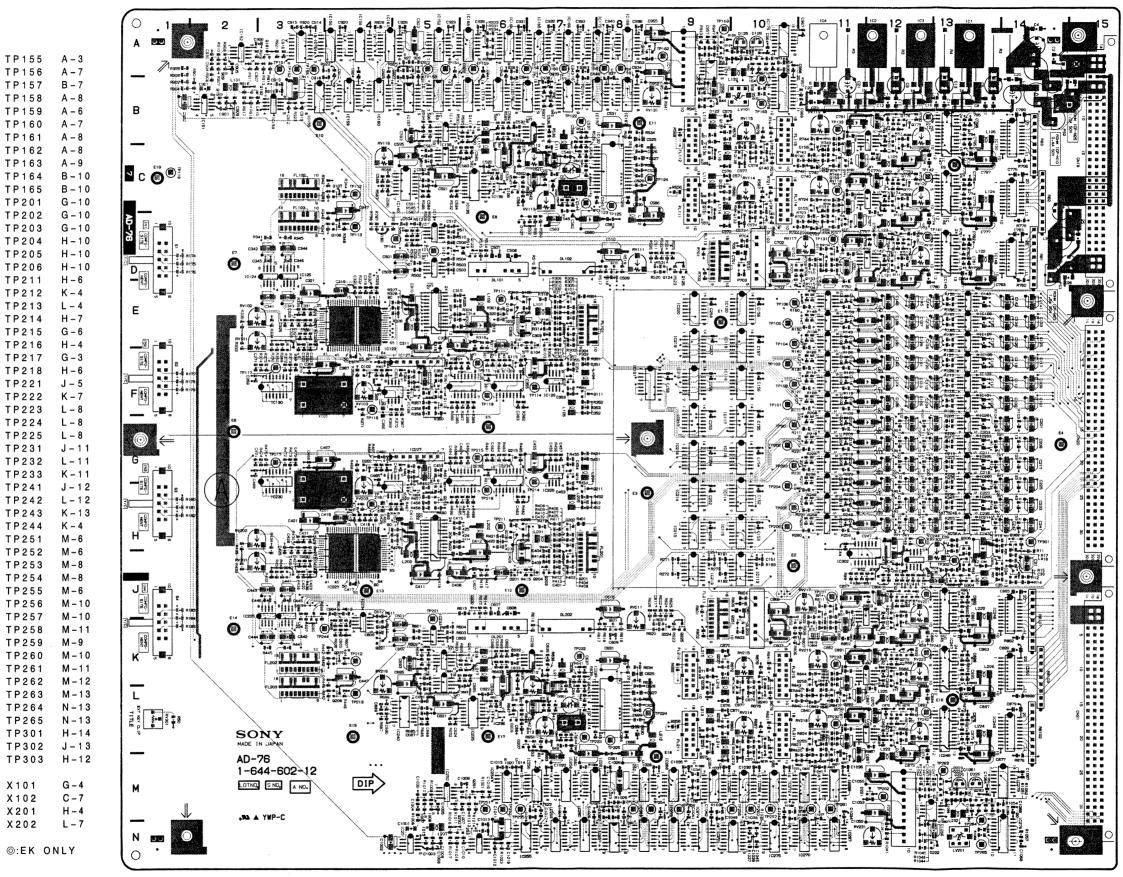
M-6

M - 9

C - 7

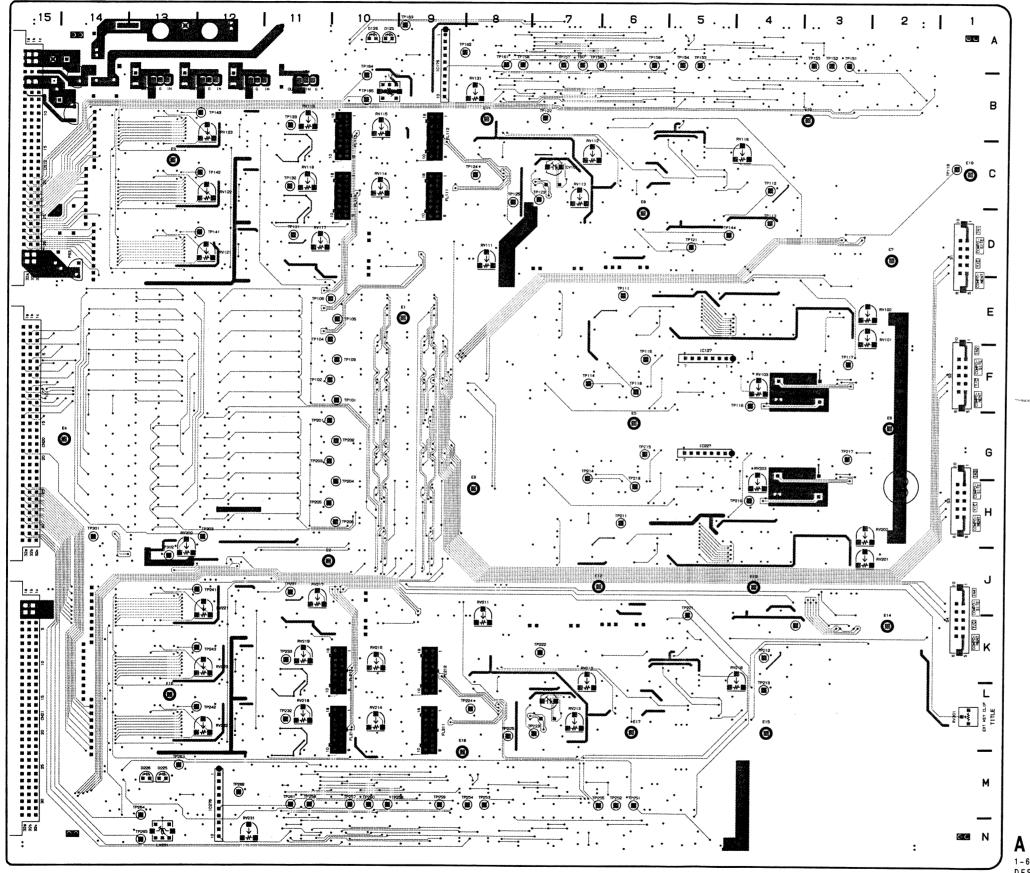
L – 7

L – 4



AD-76 -A SIDE-1-644-602-11,12 DFS-500/500P

AD-76; A/D Converter



CN20 G-15 FL102 C-3 IC12 CN21 L-15 FL103 C-3 IC12 FL111 D-9 IC14 CV101 C-7 FL113 D-9 IC14 FL114 C-10 IC15 FL102 D-7 FL115 B-10 IC15 DL102 D-7 FL201 J-8 IC15 DL103 D-10 FL202 K-3 IC15 DL201 K-6 FL203 L-3 IC15 DL202 J-7 FL211 L-9 IC15 FL213 J-9 IC1	A D - 76	(1-644-	602-12)		
CV201 L-7 FL113 D-9 IC14 FL114 C-10 IC14 FL102 D-10 IC15 DL103 D-10 FL202 K-3 IC15 DL201 K-6 FL203 L-3 IC15 DL201 K-6 FL203 L-3 IC15 DL202 J-7 FL211 L-9 IC15 DL203 K-10 FL212 K-9 IC15 DL203 K-10 FL212 K-9 IC15 DL203 K-10 FL215 K-10 IC15 DL203 K-10 FL212 K-9 IC15 DL203 K-10 FL213 J-9 IC15 DL203 K-10 FL213 J-9 IC15 DL203 K-10 FL213 J-9 IC15 D101 F-4 FL215 K-10 IC15 D102 F-4 FL215 K-10 IC15 D103 F-3	CN 20 CN 21	G – 15 L – 15	F L 1 0 2 F L 1 0 3 F L 1 1 1	C - 3 C - 3 D - 9	IC14 IC14 IC14
DL101 E-6 FL115 B-10 IC15 DL102 D-7 FL201 J-8 IC15 DL103 D-10 FL202 K-3 IC15 DL201 K-6 FL203 L-3 IC15 DL202 J-7 FL211 L-9 IC15 DL203 K-10 FL212 K-9 IC15 DL203 K-10 FL213 J-9 IC15 DL203 K-10 FL213 J-9 IC15 DL101 E-6 FL214 L-10 IC15 D102 F-4 FL215 K-10 IC15 D103 E-3 IC16 IC15 IC16 D103 E-3 IC16 IC15 IC16 D103 A-1 IC16 IC16 IC16 D107 D-6 IC2 A-12 IC16 D111 D-12 IC3 A-12 IC16 D111 D-12 IC3 A-11 I			FL113	D – 9	IC 14: IC 14:
D101 E-6 FL214 L-10 IC15 D102 F-4 FL215 K-10 IC15 D103 E-3 IC15 IC15 D106 C-6 IC1 A-12 IC16 D107 D-6 IC2 A-12 IC16 D111 D-12 IC3 A-12 IC16 D112 D-12 IC4 A-11 IC16 D113 C-12 IC101 F-13 IC16 D121 A-8 IC102 F-11 IC16 D121 A-8 IC102 F-11 IC16 D122 B-9 IC103 F-13 IC16 D123 A-10 IC104 F-11 IC16 D124 A-9 IC105 F-13 IC16 D125 A-10 IC106 F-11 IC16 D126 A-10 IC107 E-13 IC17 D201 J-6 IC108 E-11 IC17 <	DL102 DL103 DL201 DL202	D – 7 D – 1 0 K – 6 J – 7	FL115 FL201 FL202 FL203 FL211 FL212	B - 1 0 J - 8 K - 3 L - 3 L - 9 K - 9	IC 15: IC 15: IC 15: IC 15: IC 15: IC 15!
E7 D-2 IC130 F-3 IC214 E8 D-6 IC131 F-6 IC215 E9 C-13 IC132 F-6 IC216 E10 B-3 IC133 D-5 IC217 E11 B-8 IC134 D-5 IC218 E12 J-6 ©IC135 C-6 IC219 E13 J-4 ©IC136 C-6 IC220 E14 K-2 IC137 B-8 IC222 E15 L-4 IC138 B-7 IC223	D101 D102 D103 D106 D107 D111 D112 D1123 D1223 D1226 D1201 D1223 D1224 D1223 D1224 D1223 D1224 D1223 D1224 D1225 D1207 D1212 D12223	E-6 F-3 CD-12 CD-12 CD-12 CD-12 CD-12 CD-12 CD-12 CD-12 CD-12 CD-12 CD-13 CD-1	FL213 FL214 FL215 IC1 IC2 IC3 IC4 IC101 IC102 IC103 IC104 IC105 IC106 IC107 IC108 IC109 IC111 IC112 IC113 IC114 IC115 IC116 IC117 IC118 IC117 IC118 IC1120 IC121 IC122 IC123 IC124 IC125 IC126 IC127 IC128 IC127 IC128 IC127 IC128 IC127 IC133 IC134 ©IC137 IC138 IC137 IC138 IC139 IC140	J L K A A A A F F F F F E E E E E E E J H H G G F E E F F F F F F F F F F F D D C C B B C C C B B C C C B B C C C B B C C C B B C C C B B C C C B B C C C B B C C C B B C C C B B C C C B C C C B C C C B C C C C B C	C 1 5 C 1 5 C 1 5 C 1 5 C 1 5 C 1 5 C 1 6 C 1 6 C 1 6 C 1 6 C 1 6 C 1 6 C 1 6 C 1 6 C 1 6 C 1 6 C 1 6 C 1 7 C 1

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TP262

TP263

TP264

TP265

TP301

TP302

TP303

X 1 0 1

X102

X 2 0 1

X 2 0 2

O:EK OILY

R V 1 0 2

R V 1 0 3

R V 1 1 1

R V 1 1 2

R V 1 1 3

R V 1 1 4

R V 1 1 5

Q 2 0 7

Q 2 0 8

Q 2 1 1

Q212

Q 2 1 3

Q214

K – 4

L - 4

H – 8

G-7

H – 5

H - 5

E – 2

F - 4

D – 8

C - 7

C - 7

C-10

B-10

TP142

TP143

TP144

TP151

TP152

TP153

TP154

C-12

B-12

D - 4

A – 3

A – 3

A – 5

B - 7

A – 8

A - 6

A - 8

A - 8

B - 10

B - 10

G - 10

G - 10

G - 10

H - 10

H - 10

H - 6

K - 4

L - 4

G - 6

H – 4

G - 3

J - 5

K – 7

L - 8

L - 8

L - 8

J - 11

K - 11

J - 12

L-12

K - 1.3

K - 4

M - 6

M - 6

M - 8

M - 8

M – 6

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M-12

M - 13

N-13

N-13

H-14

J-13

H-12

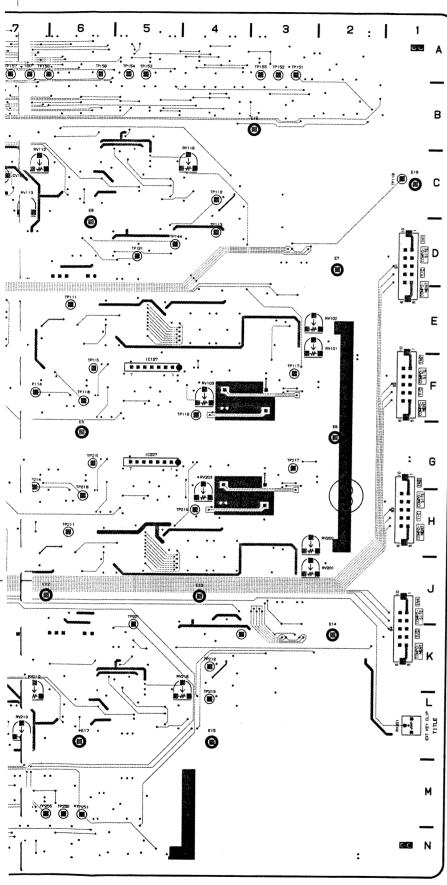
G-4

C-7

H-4

L-7

M - 9



AD-76(1-644-602-12) CN19 C = 1.5FI 101 F _ 8 IC143 C-12 IC228 H _ 5 Q102 E - 7 Q215 G - 6RV116 C - 4 CN20 G-15 FL102 C - 3 IC 144 B-12 IC229 H - 5Q103 F - 7 Q221 K – 4 R V 1 1 7 D-10 CN21 L-15 FL103 C - 3IC145 E-13 IC230 H = 3Q104 F - 7 Q222 .1 - 6 R V 1 1 8 C - 11FL111 IC146 D - 13 IC231 G - 6Q105 F - 7 Q223 K - 8RV119 B - 11 CV101 C - 7 FL112 C - 9 IC147 C-13 IC232 G - 6Q106 E - 6 Q224 K _ 9 R V 1 2 1 D-12 C V 2 0 1 L – 7 FL113 D - 9 IC148 D-13 1C233 K - 5 Q107 C - 4 Q225 K - 9 R V 122 C-12 FI 114 C-10 IC149 C-14 IC234 J - 4 Q108 D - 4 Q231 1 - 9 RV123 B-12 DI 101 E - 6 FL115 B - 10 IC150 C - 1.3©1 C 2 3 5 L - 6 Q111 F – 7 Q232 L - 9 R V 1 3 1 B - 8 DL102 D – 7 FL201 .1 - 8 IC151 B-2© I C 2 3 6 L - 6 Q112 F - 7 Q233 L-10 R V 2 0 1 J - 2 DI 103 D-10 FL202 K - 3IC152 A - 2 IC237 Q113 F - 5 Q234 L-10 R V 2 0 2 H – 2 DL201 K – 6 FI 203 1 - 3 IC153 B - 3IC238 K - 7 0114 F - 5 Q235 M - 10R V 2 0 3 H - 4 DL202 J – 7 FL211 L - 9 IC154 A - 3IC239 L – 5 Q115 F - 6 Q 2 3 6 L-10 R V 2 1 1 J – 8 DL203 K - 10 FL212 K - 9 IC155 B - 3 IC240 L - 5 0121 D-5Q237 K ~ 9 R V 2 1 2 K – 7 FL213 J – 9 IC156 A - 4 IC241 K - 5 0122 D-60238 L - 9 R V 2 1 3 L – 7 D 1 0 1 FL214 L-10 IC157 B ~ 5 IC242 K – 11 Q123 D - 8 Q239 K-10 R V 2 1 4 1 - 10D102 F - 4 FL215 K – 10 IC158 A – 4 IC243 L-12 Q124 E - 9 Q240 L-10 R V 2 1 5 K - 10D103 E - 3 IC159 B - 4 IC244 L-12 Q125 F - 9 Q241 K – 6 RV216 K – 4 D106 C - 6IC1 A - 13IC160 B - 4 IC 2 4 5 K - 13 Q131 C-9 Q 2 5 1 K-10 R V 2 1 7 J – 11 D107 D-6IC2 A - 12 IC161 A – 4 IC246 M - 13Q132 C = 9Q252 K-10 R V 2 1 8 1 - 1 1 D111 D-12 IC3 A - 12IC162 A – 5 IC247 K - 13 Q133 D - 10Q253 J-11 R V 2 1 9 K-11 D112 D-12 I C 4 A - 11 IC163 R _ 5 IC248 J - 13 Q134 C - 1.0Q254 J-11 R V 2 2 1 J-12 D113 C-12 IC 101 F-13 IC164 A - 6 IC249 1 - 13 Q135 D-10 Q255 1 - 1 1 R V 2 2 2 L - 12 D 1 2 1 A - 8 IC102 F-11 IC165 A - 7 IC250 K – 14 Q136 C = 9Q256 M - 11R V 2 2 3 K-12 D122 B - 9 IC103 F - 13 IC166 A – 7 IC251 N - 5 Q137 B - 9 Q257 M – 11 R V 2 3 1 N-11 D 1 2 3 A - 10IC104 F-11 IC167 B - 8 IC252 M – 5 Q138 C-10 Q258 K - 11 R V 3 0 1 L - 1 D124 A - 9 IC105 F-13 IC168 A – 6 IC253 N - 6 Q139 C-10 Q259 L-11 R V 3 0 2 H - 13 D125 A - 10IC106 F-11 IC169 A - 8 IC254 M - 6 Q140 C-10 Q260 L-11 D126 A - 10 IC107 E-13 IC170 B – 8 IC255 N – 7 0141 B-6Q271 J - 12 S 1 D - 1 D201 J - 6 IC108 E-11 IC171 A – 7 IC256 M - 7 Q151 D-10 Q272 J - 12 S 2 F - 1 D202 G-4IC109 E-13 IC:172 A – 8 IC257 N-80152 D - 10Q273 J-12 H-1 S 3 D203 J - 3IC110 E - 11 IC 173 B - 6 IC258 M-7Q153 E-11 0274 L-12 S 4 J - 1 D206 L - 6 IC111 E-13 IC174 B - 6 IC259 M - 7 0154 D - 1 1 Q275 L-12 D207 L - 6 IC112 E-11 IC175 B - 7 IC260 M - 7 Q155 C - 110276 L-12 TP101 F-10 D 2 1 1 K-12 IC113 J - 10IC176 A - 9 IC261 M - 8 Q156 D - 11 Q277 F-10 K-12 TP102 D212 M - 12IC114 H _ 9 IC177 A - 9 IC262 M - 8 Q157 D-11 Q278 K-12 TP103 F-10 D213 L-12 IC115 H - 9IC178 B - 10 IC263 M - 8Q158 C - 11Q279 K-12 TP104 E-10 D221 M - 11 IC116 G = 9IC179 A - 10IC264 M-9 Q159 C-11 Q280 K – 3 TP105 E-10 D222 N - 1.3IC117 G - 9 IC201 F-13 IC265 M - 10Q160 C-11 Q 2 9 1 M - 6 TP106 E-10 D223 M - 13IC118 F - 9 IC202 G-11 IC266 M - 10 Q 1 7 1 D-12 Q292 M - 6TP111 E - 6 D224 M - 13IC119 E - 9 IC203 G-13 IC267 N-11 0172 D-12 Q293 M - 13TP112 C-4D225 M - 13IC120 E - 9 IC204 G-11 IC268 M - 90173 D-12 Q301 J - 14 TP113 D226 M - 13D - 4 IC121 F - 8 IC205 G-13 IC269 M - 11Q174 C-12 0302 H-14 TP114 F - 7 D301 J-13 IC122 E - 5 IC206 G-11 IC270 N - 11Q175 C-12 Q303 J - 13 TP115 F - 6 IC123 F - 4 IC207 G-13 IC271 N - 9Q176 C-12 Q304 J-13 TP116 G – 4 E - 9 IC124 D - 2 IC208 G-11 IC272 M - 10Q177 B-12 Q305 J-13 TP117 F - 2 E 2 J-10 IC125 D - 3IC209 H - 13M – 9 IC273 Q178 B-12 0306 H-13 TP118 F - 6 H – 8 IC126 F - 7 IC210 H_11 IC274 M - 9Q179 B-12 Q307 J-12 TP119 C - 1 G-14 IC127 F - 5 IC211 H - 1.3IC275 N - 10Q180 D - 4 TP121 D - 5 F-6IC128 F - 5 IC212 H-11 IC276 M - 12 Q191 A - 3RB1 D-14 TP122 B - 7 G - 2 IC129 F - 4 IC213 J - 9 IC277 M - 12Q192 B - 3RB2 C-14 TP123 D - 8 D-2IC130 F - 3 IC214 H - 9 IC278 N-14 Q193 A - 10 RB3 C-14 TP124 C - 8D-6IC131 F - 6 IC215 H – 9 IC279 M - 14 Q 2 0 1 J - 7 **RB101** K – 14 TP125 D - 8 C - 13IC132 F - 6 IC216 G - 9IC301 J – 12 Q202 H - 7 RB102 L – 14 TP131 E10 B - 3D-11 IC133 D-5G – 9 IC217 IC302 J - 11 Q203 J – 7 RB103 K-14 TP132 C - 1.1E 1 1 B - 8 IC134 D - 5 IC218 F - 9 Q204 J - 7 TP133 E12 J - 6 B-11 ©IC135 C - 6 IC219 E - 9 LV101 B-10 Q 2 0 5 H-7R V 1 0 1 E - 2 TP141 E 13 J - 4 D-13 ©IC136 C - 6 IC220 E - 9 LV201 N - 13Q206 H-6

AD-76-B SIDE-1-644-602-11.12 DES-500/500P

E 1

E 3

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E 6

E 7

E 8

E 9

E14

E 15

E 16

E17

E 18

E 19

K – 2

L - 4

L - 6

M-9

C-1

L-13

IC137

IC138

IC139

IC140

IC141

IC142

B - 8

B - 7

C - 5

C - 5

B – 5

D - 12

IC222

IC224 K-3

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IC223

IC227

H - 5

J – 4

G – 5

PS1

PS2

PS3

Q101

B-14

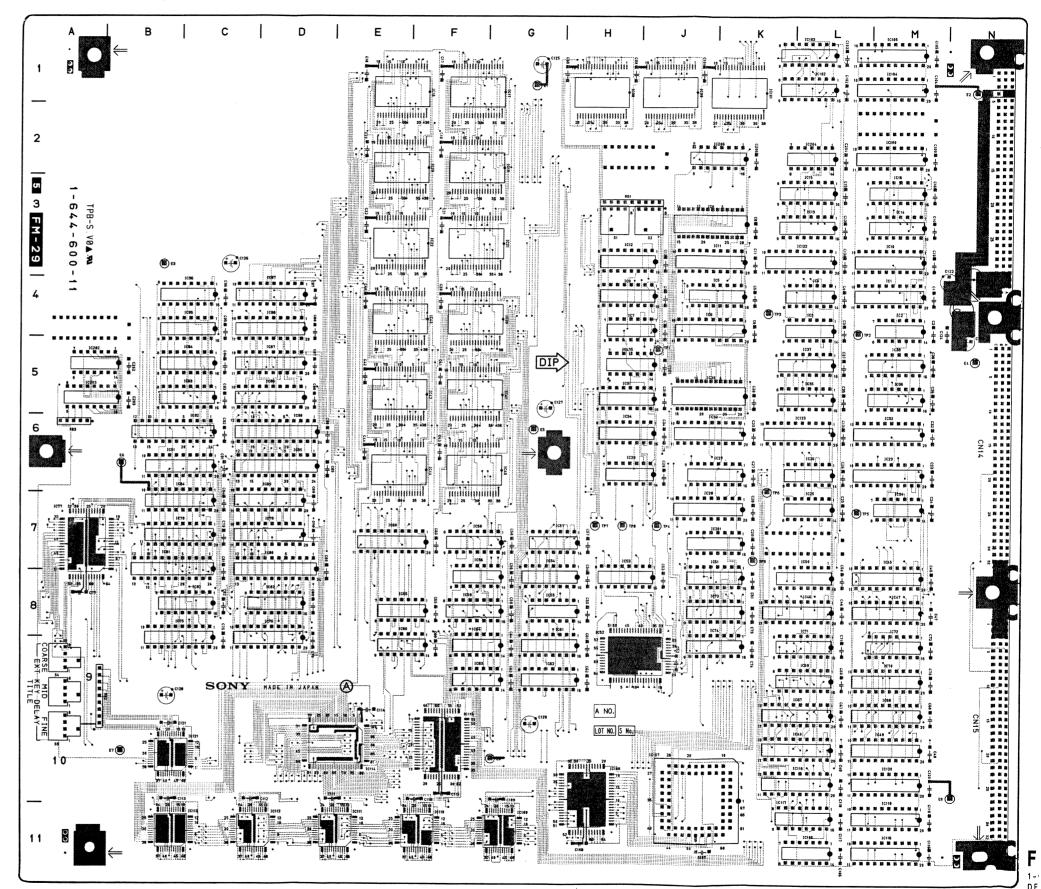
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E – 14

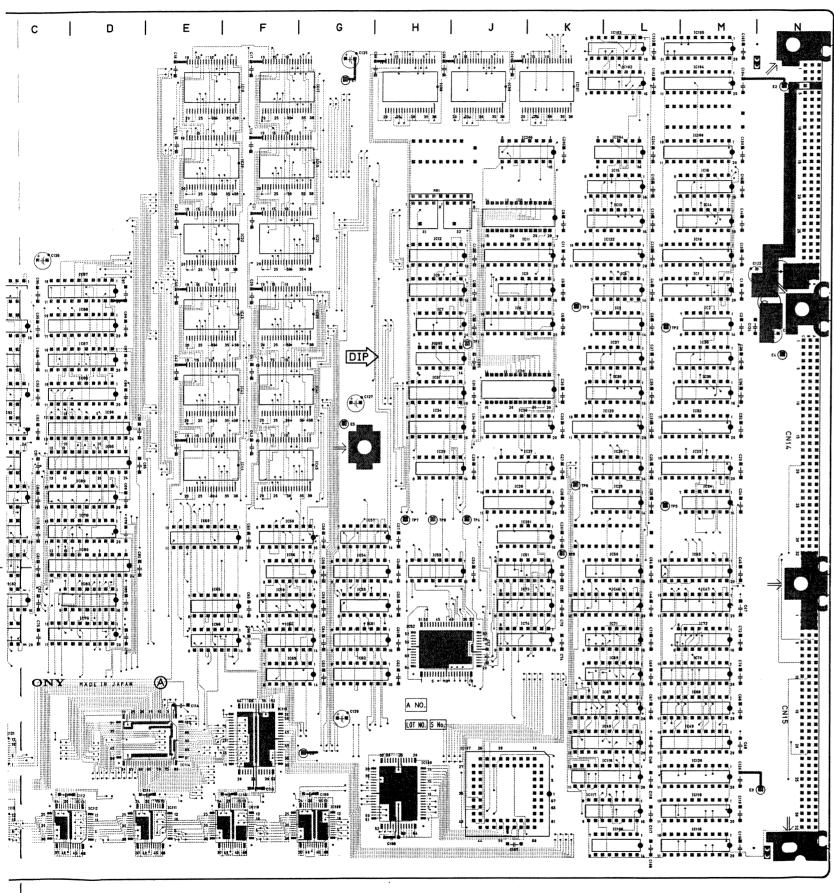
E – 7

FM-29; Frame Synchronizer

FM-29(1 - 6 4 4 - 6 0 (0 - 11)			
C N I 1 0 7	J – 10	I C 4 1 I C 4 2	G – 5 F – 5	I C 9 7 I C 9 8	D – 4 H – 1
C N 13	N – 2	I C 4 3	G - 6	I C 9 9	J – 1
CN14	N – 6	IC44	F – 6	IC100	M - 2
C N 15	N – 9	I C 4 5	M – 7	IC101	K – 1
E 1	G – 1	I C 4 6 I C 4 7	L – 8 M – 8	IC102 IC103	L – 1 L – 1
E 2	N – 1	IC48	L - 1 0	IC104	M – 1
E 3	B - 3	IC49	M – 1 0	IC105	M – 1
E 4	N - 5	IC 5 0	L - 7	IC106	L-11
E 5 E 6	G – 6 B – 6	IC51	K – 7 H – 8	IC107 IC108	J – 1 0 H – 1 0
E 7	B – 10	IC53	H – 7	IC109	G-11
E 8	G – 10	IC54	G – 7	IC110	F – 11
E 9	M – 10	I C 5 5 I C 5 6	G – 8 F – 7	IC111 IC112	E – 11 D – 11
IC1	M – 4	IC 5 7	G - 7	IC112	C-11
1 C 2	M – 4	IC58	F – 7	IC114	E – 10
I C 3	L – 4	IC 5 9	F - 8	IC115	F – 9
I C 4 I C 5	L – 4 J – 4	I C 6 0 I C 6 1	E – 7 G – 8	IC116 IC117	M – 11 K – 10
I C 6	J – 4	I C 6 2	G - 9	IC118	L - 10
I C 7	H – 4	IC63	F 9	IC119	M – 10
I C 8 I C 9	J – 3 H – 4	I C 6 4 I C 6 5	F – 8 E – 8	I C 1 2 0 I C 1 2 1	M – 10 C – 10
IC 10	M – 3	IC 6 6	E - 8	IC122	L - 3
IC11	J – 3	IC 67	L – 9	IC123	L - 6
I C 1 2 I C 1 3	H – 3 L – 3	1 C 6 8 1 C 6 9	M – 9 L – 9	I C 2 0 1 I C 2 0 2	K – 7 A – 5
IC 14	M – 3	IC 7 0	M – 9	1C202	A – 5
IC15	L - 2	I C 7 1	L – 8	IC204	L – 2
IC 16	M - 2	IC72	M – 8	IC205	H – 5
IC17 IC18	G – 1 F – 1	I C 7 3 I C 7 4	K – 8 K – 8	IC206	K – 2
IC19	G – 2	I C 7 5	C – 8	PS1	N - 3
IC 2 0	F – 2	IC76	D - 8	D.D.4	
I C 2 1 I C 2 2	G – 3 F – 3	I C 7 7 I C 7 8	A – 7 D – 7	RB1 RB2	H – 3 B – 9
I C 2 3	M – 6	IC79	C-7	RB3	A - 6
IC24	M – 6	IC80	D - 7		
I C 2 5 I C 2 6	L – 6 L – 6	I C 8 1 I C 8 2	B – 7 C – 8	S 1 S 2	H – 3 J – 3
1 C 2 7	K – 6	IC83	D - 8	S 3	A – 1 0
IC28	J - 6	I C 8 4	C-7	S 4	A – 9
IC 2 9	H – 6	IC85	D-6	S 5	A – 9
I C 3 0 I C 3 1	J – 5 H – 5	1 C 8 6 1 C 8 7	D – 5 D – 5	TP1	J – 5
IC32	M – 6	IC88	D – 4	TP2	L – 4
IC33	J – 6	IC89	D - 6	TP3	K – 4
I C 3 4 I C 3 5	H – 6 L – 5	I C 9 0 I C 9 1	D – 6 B – 6	TP4 TP5	J – 7 L – 7
IC36	M – 5	I C 9 2	C - 6	TP6	K – 6
1 C 3 7	L - 5	IC93	C - 5	TP7	H – 7
1 C 3 8	M – 5	I C 9 4 I C 9 5	C – 5 C – 4	ТР8 тра	H – 7 K – 7
I C 3 9 I C 4 0	G – 4 F – 4	IC95	C - 4	TP9	N-1
		-			

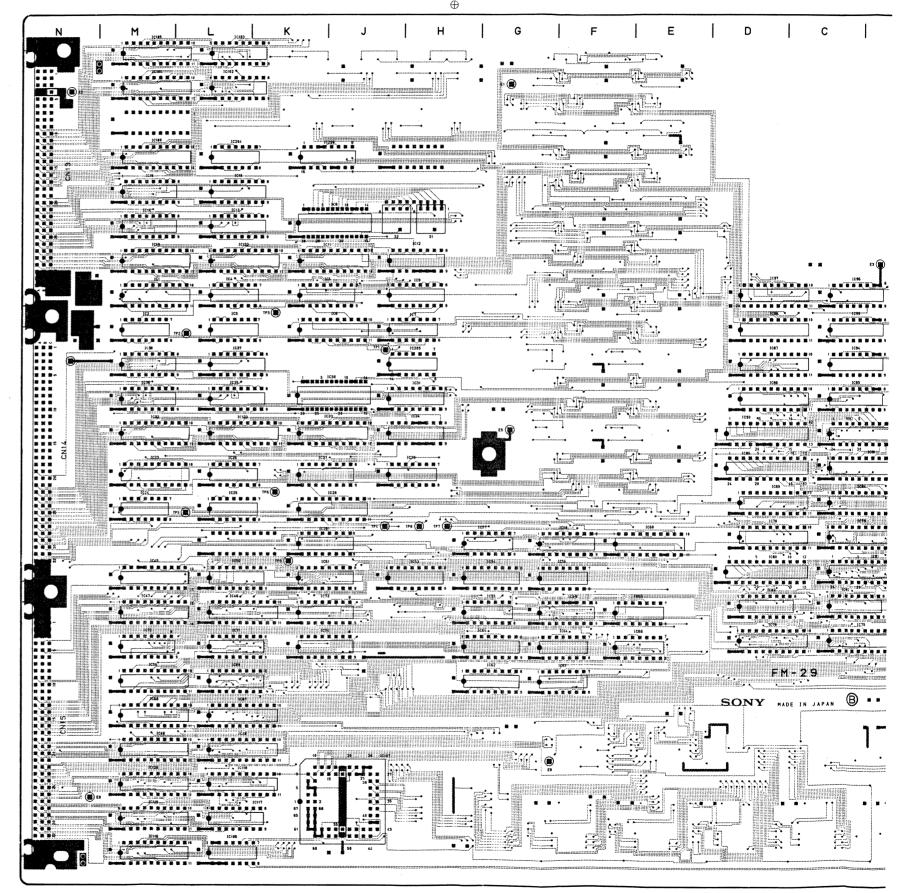


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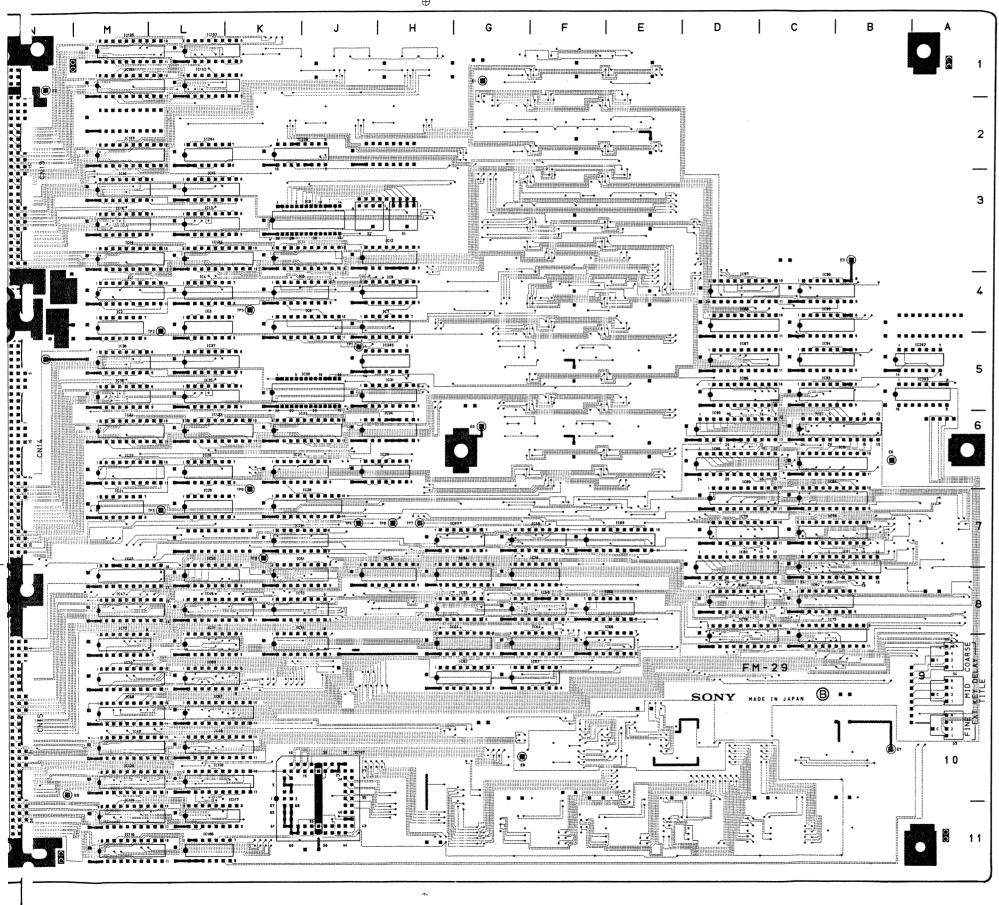


FM-29-A SIDE-1-644-600-11 DFS-500/500P

FM-29; Frame Synchronizer



M-29; Frame Synchronizer



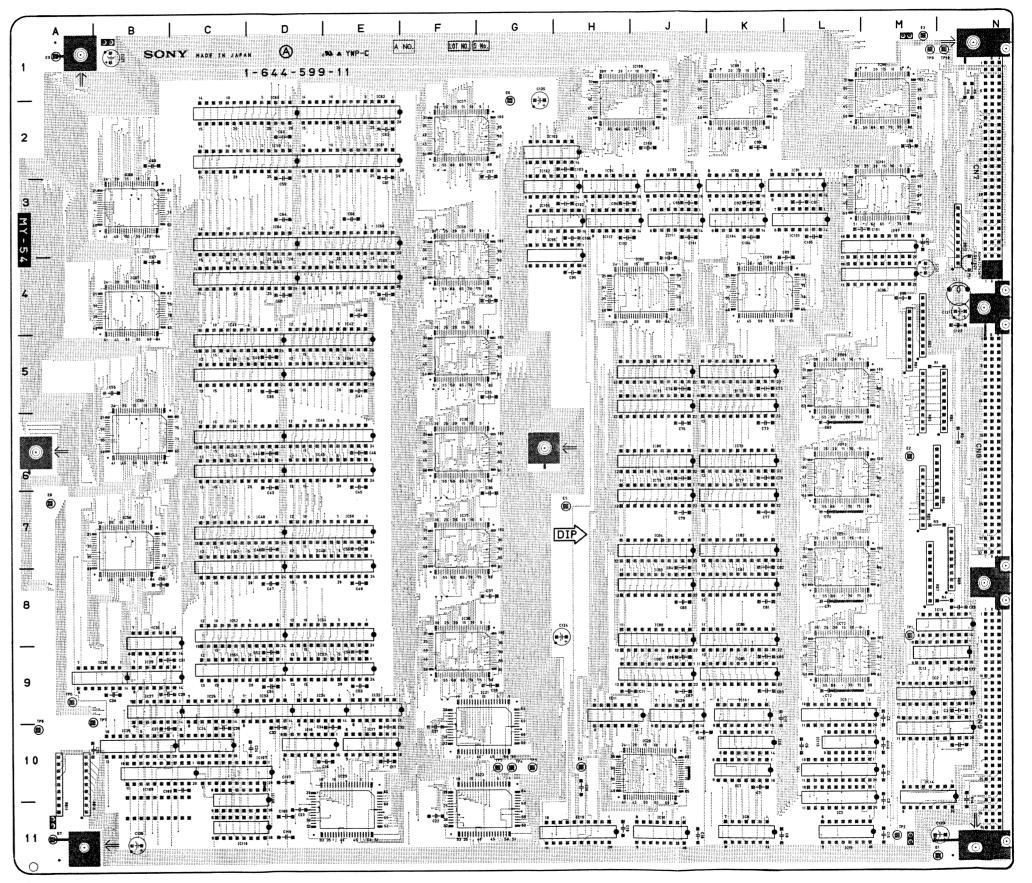
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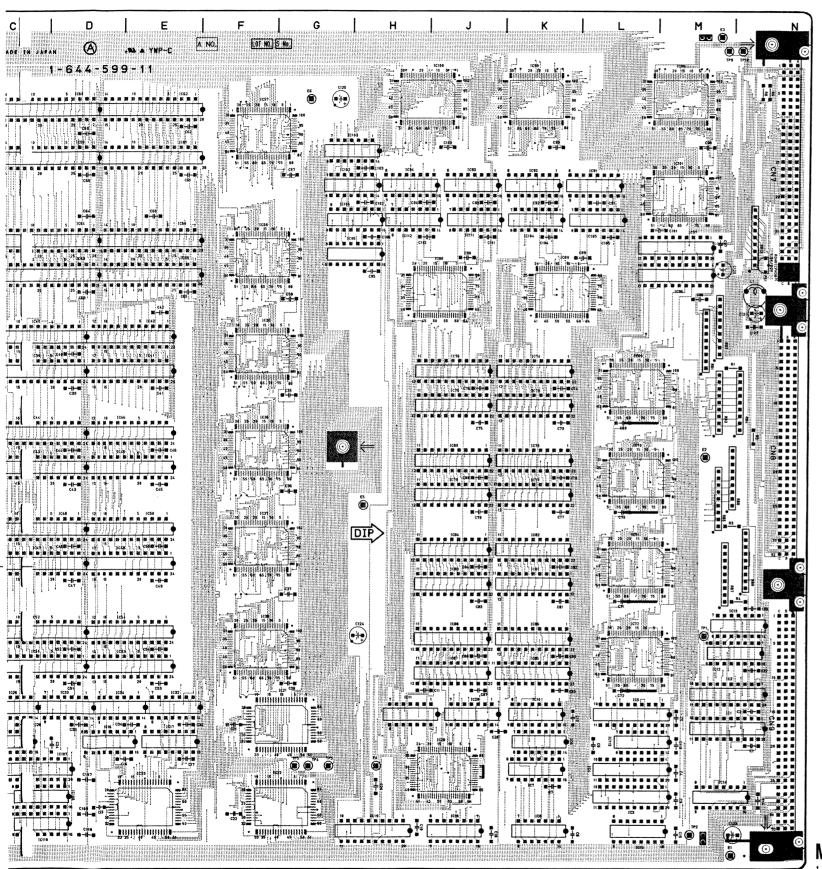
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CN13	N - 2	1 C 4 2	G – 6	1 C 9 9	J – 1
CN14	N - 6	I C 4 4	F - 6	IC100	M – 2
CN15	N - 9	I C 4 5	M – 7	IC 101	K – 1
	•	IC 4 6	L – 8	IC102	L - 1
E 1	G – 1	IC 47	M – 8	IC103	L - 1
E 2	N – 1	IC48	L-10	IC104	M – 1
E 3	B – 3	IC 49	M – 10	IC105	M – 1
E 4	N - 5	IC50	L - 7	IC106	L-11
E 5	G-6	IC51	K – 7	IC107	J – 10
E 6	B – 6	IC52	H – 8	IC108	H – 10
E 7	B – 10	IC53	H – 7	IC109	G – 11
E 8	G – 10	IC54	G – 7	IC110	F – 11
E 9	M – 10	IC55	G – 8	IC111	E – 11
		I C 5 6	F – 7	IC112	D – 11
I C 1	M – 4	IC 57	G – 7	IC 113	C – 11
I C 2	M – 4	IC58	F – 7	IC114	E – 10
I C 3	L – 4	IC 5 9	F – 8	IC115	F - 9
I C 4	L – 4	IC 6 0	E – 7	IC 116	M – 11
I C 5	J – 4	IC 6 1	G – 8	IC117	K-10
I C 6	J – 4	1 C 6 2	G - 9	IC118	L-10
I C 7 I C 8	H – 4	IC 6 3	F - 9	IC119	M – 10
I C 9	J – 3 H – 4	IC 6 4	F - 8	IC120	M – 10
I C 1 0	M – 4	1 C 6 5 1 C 6 6	E - 8	I C 1 2 1 I C 1 2 2	C – 10 L – 3
IC 1 1	J - 3	1 C 6 7	E – 8 L – 9	IC122	L - 6
I C 1 2	J - 3 H - 3	1 C 6 7	M – 9	IC 2 0 1	K – 7
IC13	L - 3	I C 6 9	L - 9	1C202	A – 5
IC14	M – 3	IC70	M – 9	10202	A – 5
IC 15	L - 2	I C 7 1	L – 8	IC204	L – 2
IC 16	M – 2	I C 7 2	M – 8	IC205	H – 5
IC 17	G - 1	I C 7 3	K – 8	1C206	K – 2
IC18	F – 1	IC74	K – 8		
IC19	G – 2	IC75	C – 8	PS1	N – 3
C 2 0	F – 2	IC76	D – 8		
I C 2 1	G – 3	IC77	A – 7	RB1	H – 3
C 2 2	F – 3	IC78	D – 7	RB2	B – 9
C 2 3	M – 6	IC79	C – 7	RB3	A – 6
C 2 4	M – 6	IC80	D – 7		
C 2 5	L – 6	I C 8 1	B – 7	S 1	H – 3
C 2 6	L - 6	I C 8 2	C – 8	S 2	J – 3
C 2 7	K – 6	IC83	D – 8	S 3	A – 10
C 2 8	J - 6	I C 8 4	C – 7	S 4	A – 9
C 2 9	H – 6	IC85	D - 6	S 5	A – 9
C 3 0	J-5	IC86	D - 5	TD4	1 5
C 3 1 C 3 2	H – 5 M – 6	1 C 8 7 1 C 8 8	D – 5 D – 4	TP1 TP2	J – 5 L – 4
C 3 3	J - 6	I C 8 9	D - 6	TP3	K – 4
C 3 4	H – 6	I C 9 0	D - 6	TP4	J – 7
C 3 5	L – 5	I C 9 1	B – 6	TP5	L – 7
C 3 6	M - 5	I C 9 2	C - 6	TP6	K – 6
C 3 7	L - 5	I C 9 3	C – 5	T P 7	H – 7
C 3 8	M – 5	I C 9 4	C – 5	TP8	H – 7
C 3 9	G - 4	IC95	C - 4	TP9	K – 7
C 4 0	F – 4	IC96	C – 4		

FM-29-B SIDE-1-644-600-11 DES-500/500P

MY-54; Field Memory

MY-54(1-644-599-11)										
CN7	N – 2	IC 4 1	E - 5	IC 9 4	H - 2					
CN8	N – 6	IC 42	E – 4	I C 9 5	G - 3					
CN9	N – 9	IC 43	C – 6	IC96	M – 4					
		IC 4 4	C – 6	IC 9 7	M – 3					
E 1	M – 1 1	IC 45	D – 6	IC98	M – 1					
E 2	M – 6	IC 46	D – 6	IC99	K – 1					
E 3	M – 1	IC 47	C – 7	IC100	J – 1					
E 4	H – 10	IC 48	D - 7	IC101	M - 2					
E 5	H – 7	IC 4 9	D - 7	IC102	G – 2					
E 6	G – 1	IC 5 0	E-7	10103	H – 2					
E 7	A – 1 1	IC 5 1	C – 9	IC104	K – 3					
E 8	A – 7	1 C 5 2	C-8	IC105	L – 3 G – 3					
E 9	A – 1	IC 5 3	D - 9	IC106 IC107	D – 10					
104	м о	IC 5 4	D - 8	IC107	D-10 D-11					
I C 1	M – 9	1C55	B – 5 B – 7	IC 109	B – 1 0					
1 C 2	M – 9	1 C 5 6 1 C 5 7	F - 2	IC 1 1 0	C-11					
1 C 3	L – 1 1 L – 1 0	1C 5 7	F - 3	IC 111	J – 3					
I C 4 I C 5	L - 9	IC 5 9	D – 2	IC 112	H - 3					
1 C 6	K-10	IC 6 0	D-1	IC113	L-10					
1 C 7	K – 10	IC 6 1	E – 2							
1 C 8	K-11	I C 6 2	E – 1	PS1	N – 4					
IC10	K – 9	IC63	D – 4							
IC11	H – 9	IC 6 4	D - 3	RB1	M-5					
IC12	M – 9	IC65	E – 4	RB2	M – 5					
IC13	N – 8	I C 6 6	E – 3	RB3	M – 6					
IC14	M – 10	I C 6 7	B – 4	RB4	N – 6					
IC15	L-11	IC68	B – 2	RB5	M – 7					
IC16	D – 10	IC 69	L – 5	RB6	N – 7					
IC17	E – 10	IC70	L – 6	RB7	M – 8					
IC18	J – 11	IC71	L – 7	RB8	N - 8					
IC19	H-11	IC72	L – 8	RB10	A – 11					
IC20	J – 10	IC73	K – 5	RB11	A – 11					
I C 2 1	G – 9	IC74	K - 5	R B 1 2	N – 3					
1 C 2 2	G-10	IC75	J – 5	TP1	M – 8					
1 C 2 3	E-10	1C76	J – 5 K – 6	TP2	M – 1 1					
IC24	C-10	1 C 7 7 1 C 7 8	K – 6	TP3	G – 10					
1 C 2 5 1 C 2 6	B – 1 0 C – 9	IC79	J – 6	TP4	G-10					
1C27	B - 9	1C80	J – 6	TP5	G-10					
1 C 2 8	J – 9	I C 8 1	K – 8	TP6	A - 9					
1029	B – 9	I C 8 2	K – 7	TP7	B - 9					
IC30	B – 9	I C 8 3	J – 8	TP8	B – 9					
I C 3 1	B - 8	IC84	J – 7	TP9	M – 1					
IC32	E – 9	IC85	K – 9	TP10	N – 1					
IC33	D – 9	IC86	K – 8							
1 C 3 4	D – 9	I C 8 7	J – 9							
IC35	F – 4	I C 8 8	J – 8							
IC36	F – 6	IC89	K – 3							
IC37	F – 7	IC 9 0	J – 4							
IC38	F – 8	IC 9 1	L – 2							
IC39	C – 5	IC 9 2	K – 2							
IC40	C – 4	IC93	J – 2							

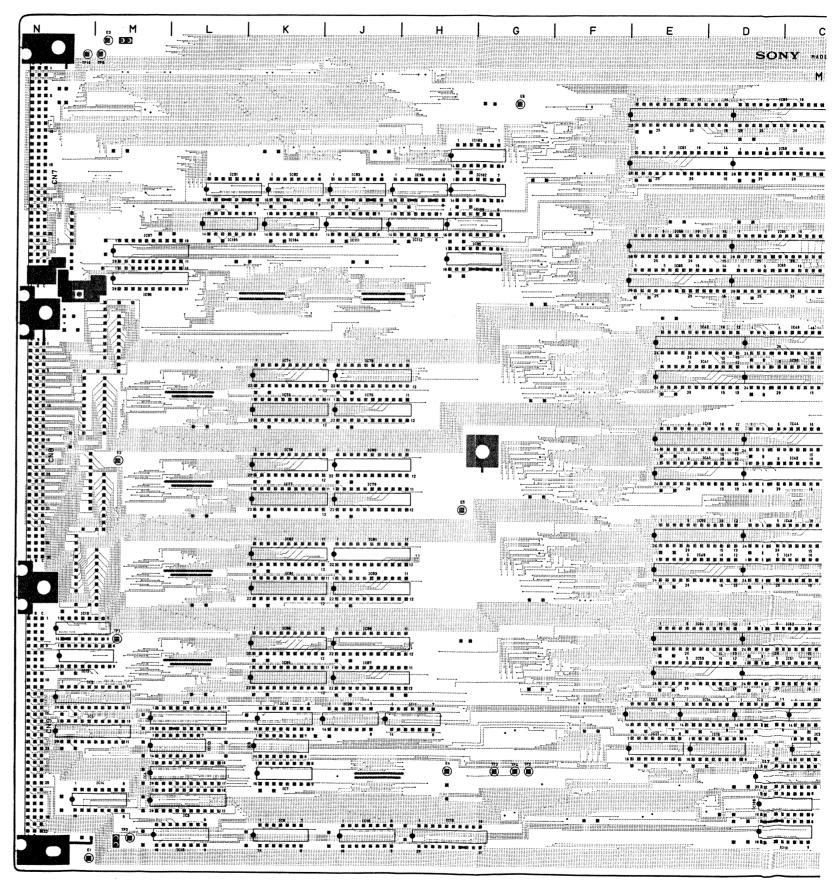




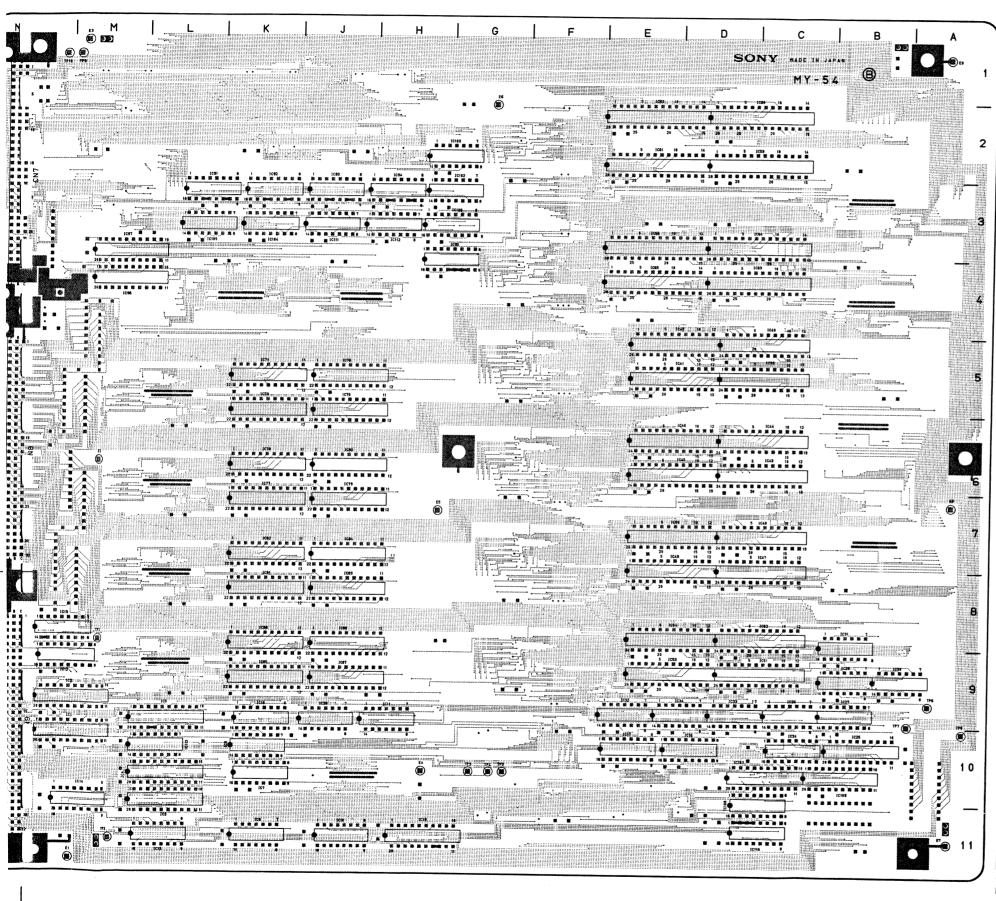
MY-54-A SIDE-

PROCESS UNIT MY-54 MY-54 PROCESS UNIT

MY-54; Field Memory



1 √ · 54; Field Memory

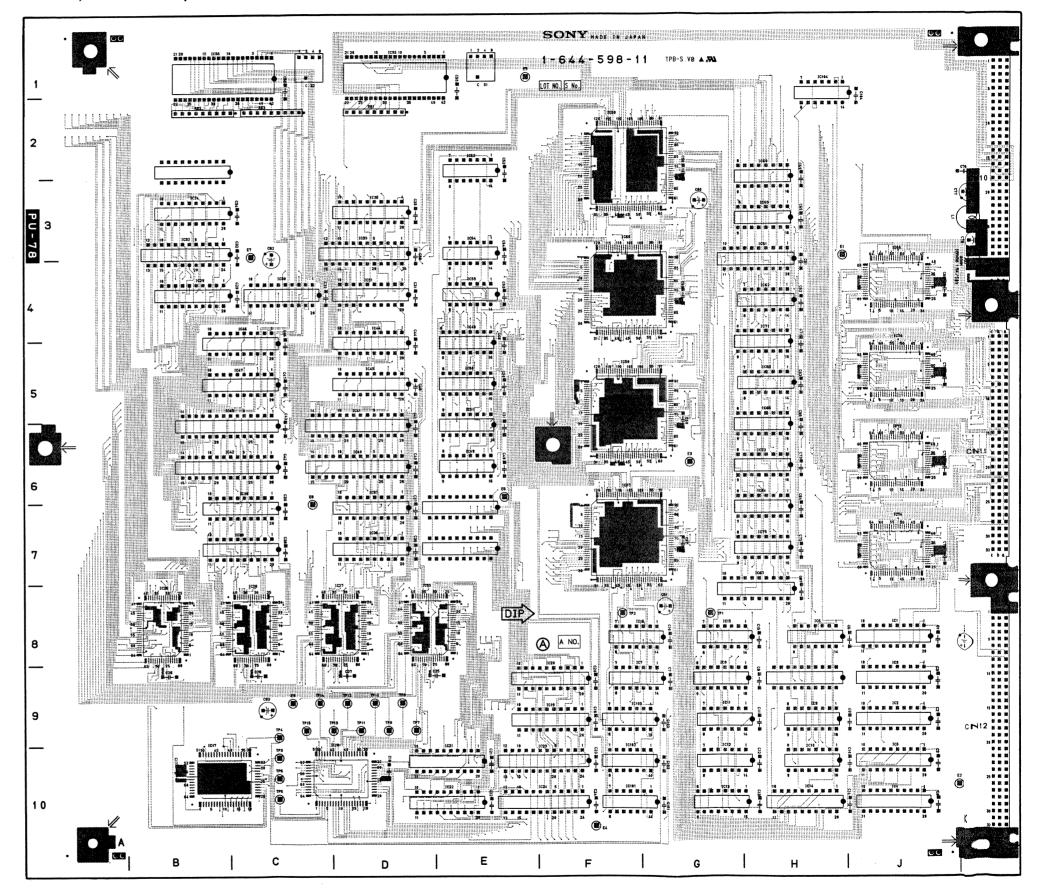


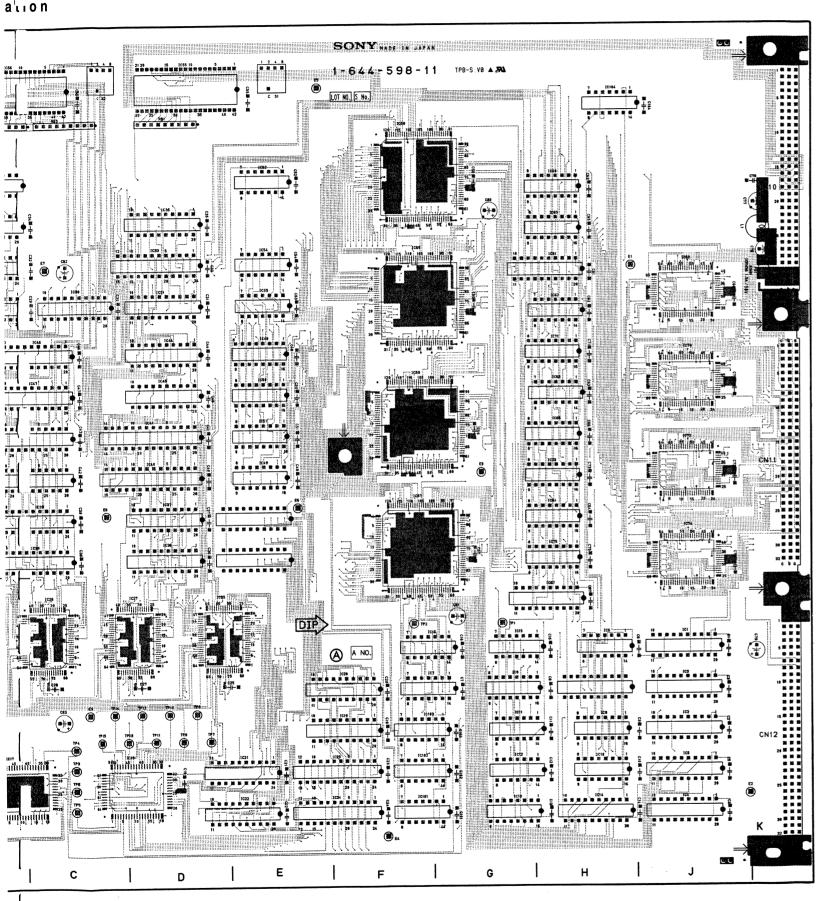
MY-54(1-644-599-11) N-2IC 4 1 E – 5 IC94 H – 2 CNS N-6IC42 E – 4 IC95 G - 3CN9 N - 9 LC 4.3 C = 6IC96 M-4IC44 C - 6 IC97 M - 3M - 11IC 45 D = 6IC98 M - 1 E 2 M-6IC46 IC99 K _ 1 E 3 M – 1 IC 47 C - 7 IC100 J - 1 E 4 H-10 IC48 D – 7 IC101 M-2 IC49 D - 7 IC102 G - 2 E 6 G - 1 IC50 IC103 H-2 E 7 A - 11 IC51 C = 9IC104 E 8 A - 7 IC52 C - 8 IC105 1 - 3 E 9 IC53 D - 9 IC106 G-3 IC 54 IC107 D - 10 IC1 IC55 B - 5 IC 108 D-11 IC2 M - 9 IC 5 6 B – 7 IC109 B-10 LC3 IC57 F - 2 IC110 C-11 IC4 L-10 IC58 F - 3 IC111 J - 3 1 C 5 L – 9 IC59 D-2 IC 112 H-3 K - 10IC 6 0 D - 1IC113 L-10 LC 7 K - 10IC61 I C 8 K-11 1062 F - 1 N - 4 IC 10 K - 9 IC63 D – 4 IC11 IC 64 D-3M -5 IC12 M _ 9 IC65 RB2 M -5 IC13 N - 8 IC66 F - 3RB3 M -6 IC14 M - 10IC 67 B – 4 RB4 N -6 IC15 IC68 B-2RB5 M -7 IC16 D - 10IC 69 N -7 IC 17 E-10 IC70 1 - 6 RB7 M -8 IC18 J = 1.1IC71 L – 7 N -8 IC 19 H-11 IC72 L - 8 **BB10** A -1 1 IC20 J - 10 IC73 K – 5 A -1 1 IC21 G - 9 IC74 K – 5 N-3IC22 G-10 LC 7.5 J - 5 IC 23 E-10 IC76 J – 5 M -8 IC24 C-10 LC 7 7 K ~ 6 LC 25 B - 10IC78 K – 6 TP3 G-10 IC26 C - 9 IC 79 J - 6 TP4 IC27 B - 9IC80 TP5 G -10 IC28 J - 9 IC81 K _ 8 TP6 A - 9 IC29 B - 9IC82 K – 7 TP7 B - 4 IC30 IC83 J - 8 TP8 B - 9 IC31 B – 8 IC84 J – 7 M - 1 IC32 E - 9 IC85 K - 9 TP10 N - 1 IC33 D - 9 IC86 K – 8 IC34 D – 9 IC87 J = 9IC35 F - 4 IC88 J - 8 IC36 F - 6 IC89 K – 3 IC37 IC 9 0 J - 4 IC38 F - 8 IC91 L - 2 IC39 C - 5 IC92 K – 2 IC40 C - 4 IC93 J – 2

MY-54-B SIDE-

PU-78; Address Operation

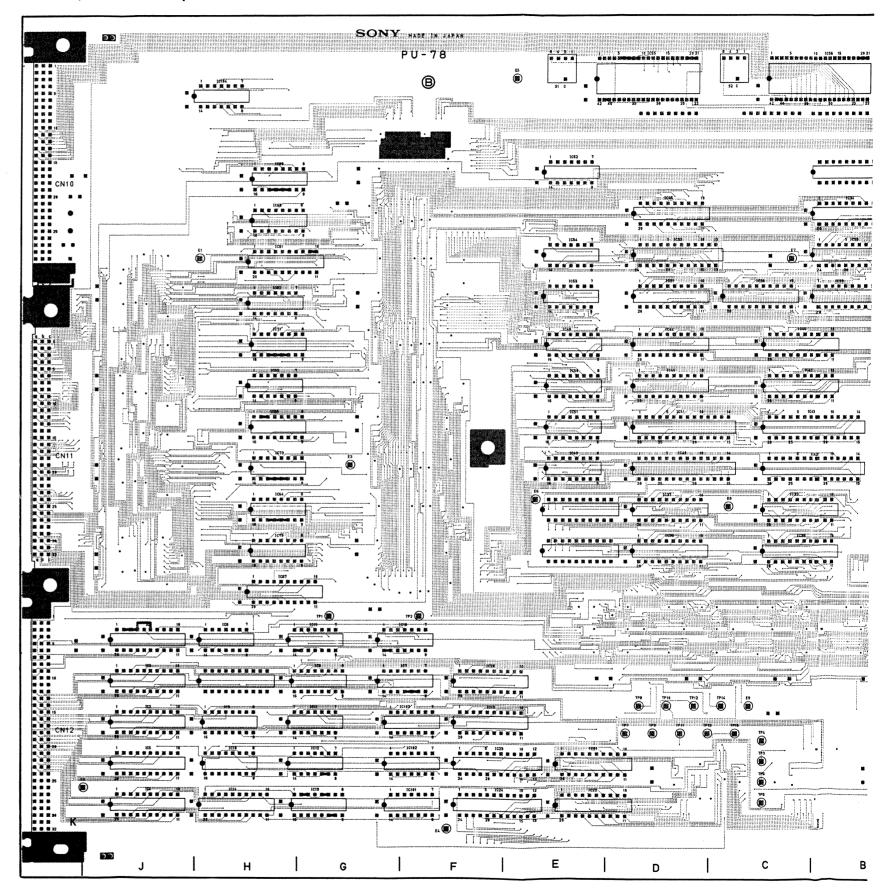
P U - 78	(1-644-59	98-11)			
CN10	K – 2	IC 4 0	D - 6	TP4	C - 9
CN11	K – 6	IC 4 1	D - 5	TP5	C-10
C N 1 2	K – 9	1 C 4 2	C - 6	TP6	C = 10 D = 9
- 4		1 C 4 3	C – 5	TP7 TP8	D - 9
E 1	H – 3	1 C 4 4 1 C 4 5	D – 4 D – 5	TP9	D – 9
E 2	J – 1 0 G – 6	1C 4 6	C - 4	TP10	D – 9
E 3 E 4	F – 10	IC 47	C - 5	TP11	D – 9
E 5	E – 1	I C 4 8	E – 4	TP12	D – 9
E 6	E - 6	IC49	E - 6	TP13	D - 9
E 7	C - 3	IC 5 0	E - 5	TP14	C – 9
E 8	C – 6	IC51	E - 5	TP15	C – 9
E 9	C – 9	IC52	E – 2		
		IC53	E – 4		
IC1	J – 8	IC 5 4	E – 3		
1 C 2	J – 9	IC 5 5	D – 1		
I C 3	J – 8	IC 5 6	B – 1		
IC4	J – 10	IC 5 7	F - 6		
I C 5	J – 10	IC 5 8	F – 2		
I C 6	H - 8	IC 5 9	F - 5		
I C 7	F – 8	I C 6 0 I C 6 1	F – 3 H – 3		
I C 8 I C 9	G – 8 H – 9	1 C 6 2	H – 4		
IC 1 0	H – 10	1 C 6 3	H – 5		
IC 1 1	G - 9	IC 6 4	H – 6		
IC 12	G - 10	IC 6 5	H – 3		
IC 13	G-10	IC 6 6	H – 5		
IC14	H – 10	IC 67	H – 7		
IC 15	G – 8	IC68	J – 3		
IC16	F – 8	IC 69	H – 2		
I C 1 7	B – 9	IC70	J – 4		
IC18	D – 9	IC71	H – 4		
IC 19	F – 9	IC72	J – 6		
IC20	F – 8	IC 73	H – 6		
IC21	E - 10	IC 7 4	J – 7		
IC 2 2	E-10	IC 75	H-7		
IC 2 3	F-10	IC101 IC102	F – 1 0 F – 1 0		
IC 2 4	F-10	IC 102	F – 9		
IC 25	D – 8 B – 8	IC 103	H – 1		
I C 2 6 I C 2 7	D – 8	10104	11-1		
1C28	C – 8	PS1	K – 4		
IC 2 9	B – 4				
IC30	C – 4	RB1	D - 2		
IC31	D – 4	RB2	B – 2		
IC32	B – 3	RB3	C - 2		
IC33	D - 3				
IC34	B – 3	S 1	E – 1		
IC35	D – 3	S 2	C – 1		
IC36	D – 7				
IC37	D – 6	TP1	G - 8		
1 C 3 8	C – 7	TP2	F - 8		
IC39	C – 6	TP3	C – 10		





PU-78-A SIDE-

PU-78; Address Operation



TP4

TP5

TP6

TP7

TP8

TP9

TP10

TP11 TP12

TP13

TP14 TP15 C - 9

C-10

C-10

D – 9

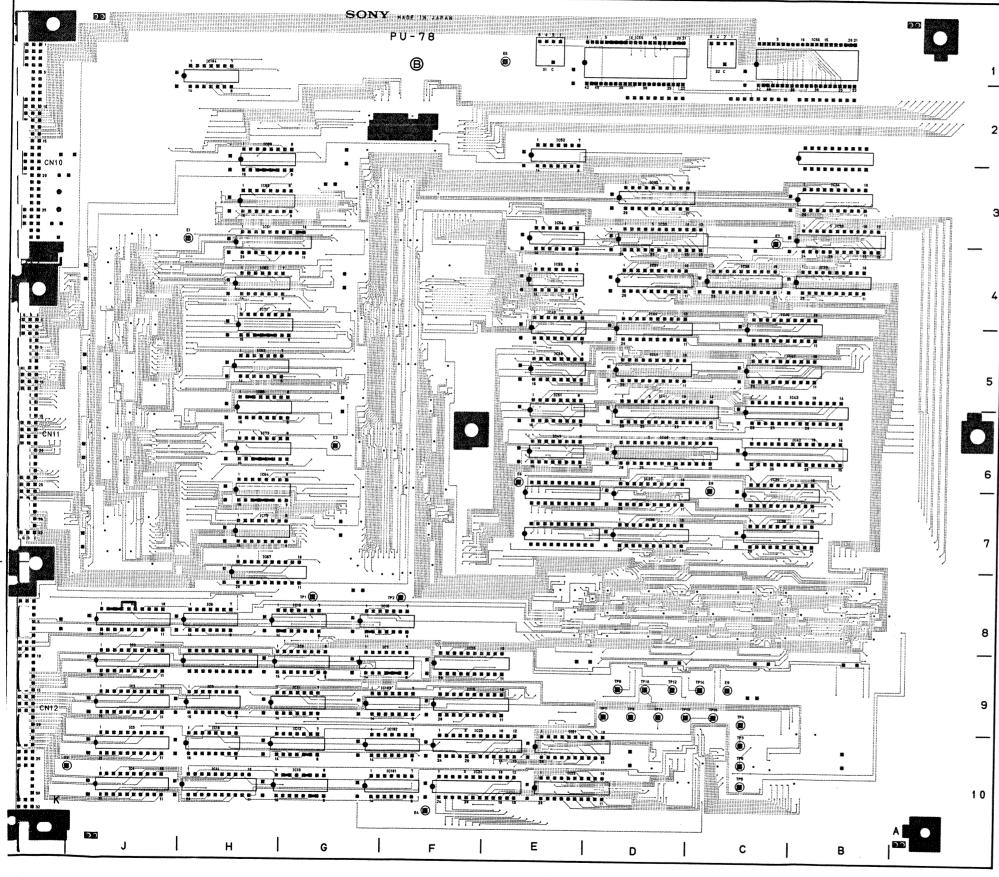
D - 9

D - 9

D - 9

C - 9

6 – 9

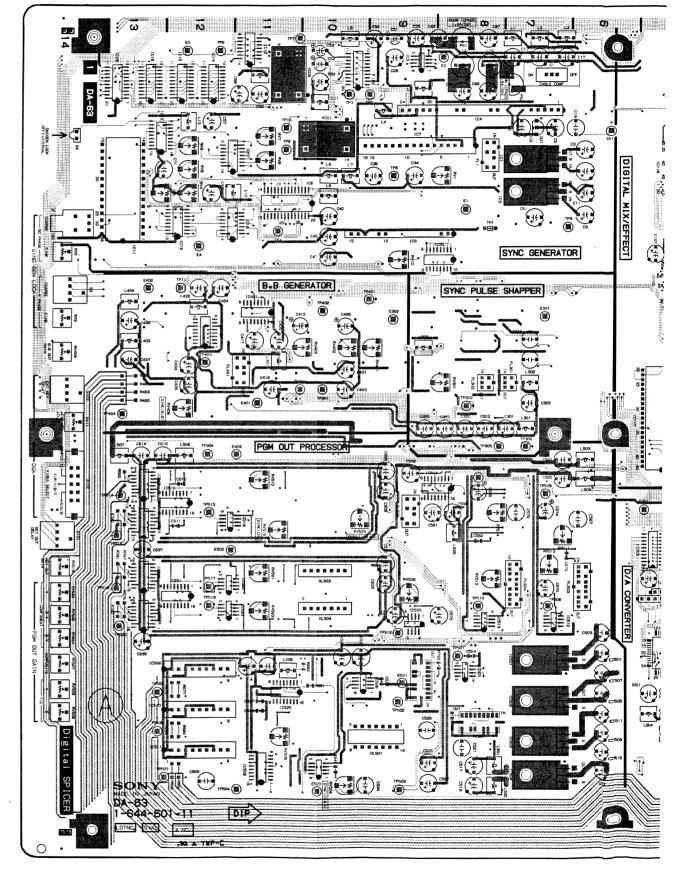


PU-78(1-644-598-11)								
CN10 CN11 CN12	K - 2 K - 6 K - 9	I C 4 0 I C 4 1 I C 4 2	D - 6 D - 5 C - 6					
E 1 E 2 E 3 E 4 E 5 E 6 E 7 E 8 E 9	H-3 J-10 G-6 F-10 E-1 E-6 C-3 C-6	IC 4 3 IC 4 4 IC 4 5 IC 4 6 IC 4 7 IC 4 8 IC 4 9 IC 5 0 IC 5 1	C - 5 D - 4 D - 5 C - 4 C - 5 E - 4 E - 6 E - 5 E - 2					
IC 1 IC 2 IC 3 IC 4 IC 5 IC 6 IC 7 IC 8 IC 9 IC 10 IC 11 IC 12 IC 13 IC 14 IC 15 IC 16 IC 17 IC 18 IC 19 IC 20 IC 21 IC 22 IC 23 IC 24 IC 25	J-8 J-9 J-8 J-10 J-10 H-8 F-8 G-9 G-10 G-10 G-8 F-8 B-9 F-9 F-10 E-110 F-10 D-8	IC 5 3 IC 5 4 IC 5 5 IC 5 6 IC 5 7 IC 5 8 IC 5 9 IC 6 0 IC 6 6 1 IC 6 2 IC 6 3 IC 6 4 IC 6 5 IC 6 6 IC 6 7 IC 6 8 IC 6 7 IC 7 1 IC 7 2 IC 7 3 IC 7 4 IC 7 5 IC 1 0 1 IC 1 0 2 IC 1 0 3	E-4 E-3 D-1 F-6 F-5 F-3 H-4 H-5 H-7 J-3 H-4 J-6 H-7 F-10 F-9					
I C 2 6 I C 2 7 I C 2 8	B - 8 D - 8 C - 8	IC104 PS1	H – 1 K – 4					
I C 2 9 I C 3 0 I C 3 1 I C 3 2 I C 3 3	B - 4 C - 4 D - 4 B - 3 D - 3	RB1 RB2 RB3	D - 2 B - 2 C - 2					
C 3 4 C 3 5 C 3 6	B - 3 D - 3 D - 7	S 1 S 2	E – 1 C – 1					
C 3 7	D - 6 C - 7 C - 6	TP1 TP2 TP3	G - 8 F - 8 C - 1 0					

PU-78-B SIDE-

DA-63	3;D/A	Conv	erter
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D A - 63	(1-644-6	601-11)									
CN1	B – 1	IC101	G – 3	⊚JR10	* C - 11	Q416	* D – 1 2	Q567	* J – 12	R V 5 2 6	H – 9
CN2	F-1	IC 102	F – 3	JR11	* C – 11	Q417	* D – 12	Q 5 6 8	* J – 13	111020	11 0
CN3	K – 1	IC103	D - 2	©JR12	* C - 11	Q418	* D - 13	Q572	* H – 10	S 1	A – 7
C N 4 0	H – 1	IC104	D – 3	JR13	* C – 9	Q419	* D – 13	Q573	* H – 11	S 2	C - 1 4
C N 5 0	D – 1	IC105	D - 5	⊚J R 1 4	* C – 9	Q420	* E – 1 2	Q 5 7 4	* G ~ 9	S 3	D – 1 4
		IC108	E – 4	JR15	* C - 9	Q421	* E – 12	Q 5 7 7	* H – 9	S 1 0 1	H – 1 4
DL501	L – 9	IC109	F – 4	©JR16	* C - 9	Q 4 2 2	* E - 12	Q 5 7 8	* J – 9	S 1 0 2	G – 1 4
D L 5 0 3 D L 5 0 4	H – 10 J – 10	IC110 IC111	F – 4 J – 4	JR17 ©JR18	* A – 12 * A – 12	Q 4 2 3 Q 4 2 4	* F – 1 2 * E – 1 3	RB101	A – 1	S103	F – 1 4
D L 3 U 4	J - 1 U	IC111	5 – 4 E – 4	©JR 20	* A – 12	Q424	* E – 13	RB101	A – 1	TH1	C - 8
D 1	* C – 9	IC114	B – 2	JR21	* A – 11	Q426	* E - 13	RB102	A – 1		0 0
D 2	* B – 11	IC 115	B – 4	©JR22	* A – 11	Q427	* E – 9	RB104	G – 1	TP1	B - 6
D 3	* B – 12	IC116	B – 5	JR401	* D – 10	Q428	* F – 12	RB105	G – 1	TP2	A - 9
D 4	B – 14	IC117	F – 6	⊚JR402	* D – 10	Q501	* L – 8	RB106	F – 1	TP3	A – 1 0
		IC118	J – 3	JR403	* E – 11	Q502	* L – 7	RB107	F – 1	TP4	C-11
E 1	C – 8	IC119	J – 3			Q503	* K – 8	RB108	G – 2	TP5	A - 1 2
E 2	A – 8	IC 2 0 1	K – 3	PS1	A – 8	Q506	* L – 8	RB109	G – 2	TP6	B - 9
E 3	A - 12	10202	L – 3	PS2	A – 7 C – 1	Q507	* K – 8	RB110 RB111	F - 2	T P 7 T P 8	A – 1 1 B – 1 1
E 4	D – 1 2 H – 2	1 C 2 0 3 1 C 2 0 4	H – 4 H – 4	PS3	C - 1	Q 5 0 8 Q 5 1 2	* K – 9 * L – 9	RB112	F – 2 D – 1	TP9	C-7
E 1 0 1 E 1 0 2	п – 2 В – 4	1C204	H - 5	Q1	* A – 6	Q512 Q514	* L - 10	RB112	D - 1	TP10	B – 1 1
E 102	E – 3	IC 2 0 6	J – 4	Q2	* A – 6	Q515	* L – 10	RB114	C-1	TP11	D-12
E 2 0 1	G – 5	IC 2 0 7	J – 5	Q3	* A – 9	Q516	* L – 10	RB115	C – 1	TP201	G-5
E 2 0 2	L – 4	IC208	K – 4	Q 4	* A – 10	Q 5 1 7	* L – 1 1	RB202	H – 4	TP202	G - 5
E 3 0 1	D – 7	IC401	D – 11	Q 5	* B - 8	Q518	* L – 10	RB203	J – 4	TP203	L - 4
E302	D – 9	IC402	E – 12	Q 6	* C - 8	Q519	* K – 1 1	RB204	J – 5	TP204	L - 5
E 4 0 1	F – 1 1	IC501	K – 7	Q 7	* C - 7	Q520	* K – 1 1	RB205	K – 4	TP205	L – 5
E 402	D – 13	IC502	K – 7	Q 8	* C - 7	Q 5 2 1	* K – 1 1			TP206	L - 4
E 4 0 3	F – 11	IC503	L - 7	Q9	* A – 11	Q 5 2 2	* G – 6	RV1	B – 8	TP301	F – 1 0
E 5 0 1	K – 9	IC504	L – 7	Q 1 0	* B – 13	Q 5 2 3	* H – 6	RV2	D-14	TP302	E-11
E 5 0 2	H-12	IC505	K – 8 K – 9	Q 1 1 Q 2 0 1	* B – 1 2 * K – 4	Q 5 2 4 Q 5 2 5	* J – 6 * H – 9	RV3 RV4	E – 1 4 C – 1 2	TP303 TP304	F – 8 F – 12
E 5 0 3	L – 10	1 C 5 0 6 1 C 5 0 7	L-10	Q201 Q202	* K – 4 * K – 4	Q525 Q526	* n - 9 * J - 7	RV5	C-12	TP304	F-12 F-8
FL1	B - 8	IC507	L-11	Q202	* K – 4	Q 5 2 7	* H – 7	RV6	B-11	TP306	F - 7
FL301	E – 7	IC509	K-13	Q204	* L – 4	Q528	* H – 7	RV7	B-11	TP401	D - 9
FL302	E – 8	IC510	K-13	Q301	* D – 9	Q529	* G - 7	RV8	B – 12	TP403	E - 12
F L 4 0 1	E – 12	IC511	L-13	Q302	* E - 9	Q530	* G - 7	RV9	B – 12	TP404	F – 13
F L 5 0 1	L – 8	IC512	J – 7	Q303	* E – 9	Q 5 3 1	* H – 7	R V 1 0	D – 9	TP501	J – 8
FL502	K – 9	IC513	J – 8	Q304	* F – 9	Q532	* J – 7	R V 1 1	F – 14	TP502	K – 9
FL503	J – 7	IC514	G – 9	Q305	* D – 8	Q 5 3 3	* J – 8	R V 3 0 1	E – 8	TP503	L - 9
FL504	H – 7	IC516	G – 12	Q306	* E - 8	Q 5 3 4	* H – 7	©R V 4 0 1	E - 9	TP504	L-12
FL505	G – 9	IC517 IC518	G-13	Q307	* E - 8	Q 5 3 5	* H – 8	RV402	E-10	TP505	K-13
I C 1	B – 8	IC518	H – 13 H – 13	Q308 Q309	* E – 7 * D – 7	Q 5 3 6 Q 5 3 7	* G – 8 * G – 8	©R V 4 0 3 R V 4 0 4	E – 1 0 E – 1 4	TP506 TP507	L – 1 3 L – 1 3
1 C 2	B – 7	IC 5 2 0	H-11	Q311	* E - 7	Q538	* G – 8	RV404	F-12	TP508	J = 7
1 C 3	C – 8	IC 5 2 1	H – 12	Q312	* F - 7	Q 5 4 0	* K – 10	RV504	L - 10	TP509	G – 7
I C 4	B – 8	IC522	H – 13	Q313	* D – 8	Q 5 4 1	* K – 1 0	RV506	L-11	TP510	J – 8
I C 5	A – 9	IC523	J – 1 1	Q315	* E - 8	Q542	* K – 10	R V 5 0 7	K – 14	TP511	G - 8
1 C 6	A – 9	IC524	J – 13	Q316	* F - 8	Q545	* G – 11	R V 5 0 8	K – 14	TP512	J - 9
I C 7	B – 9	IC525	K – 11	©Q401	* E – 10	Q546	* G – 12	R V 5 0 9	K – 14	TP514	G – 13
I C 8	C-10	IC526	J – 9	Q402	* E – 9	Q 5 4 8	* G – 12	R V 5 1 1	H – 7	TP515	G – 12
I C 9	C – 9	IC 6 0 1	K – 2	Q403	* D – 10	Q 5 4 9	* G – 13	R V 5 1 2	H – 8	TP516	H - 13
IC10	A – 11	IC602	J – 2	©Q404	* E – 10	Q 5 5 1	* G – 11	©RV513	H – 7	TP517	H-12
IC11	C-13	IC603	H – 1	©Q405 Q406	* D – 11	Q 5 5 3	* H – 12	R V 5 1 4 R V 5 1 5	H – 8 G – 11	TP518 TP519	J – 1 3 J – 1 2
I C 1 2 I C 1 3	B – 1 3 C – 1 2	JR1	* A – 1 1	Q 4 0 6	* D – 1 1 * E – 1 1	Q 5 5 4 Q 5 5 6	* H – 13 * J – 10	R V 5 1 5 R V 5 1 6	G-11 H-14	TP519	J - 12 J - 13
1C 13	A – 12	©JR2	* A – 1 1 * A – 1 0	Q 4 0 7	* D – 1 1	Q556 Q557	* H = 11	RV518	H-11	11 320	J = 1 J
IC 1 4	A-12 A-12	JR3	* J = 10	Q400 Q409	* E - 11	Q 5 5 8	* J – 1 1	RV510	J – 1 4	VCO1	B - 10
IC16	A – 13	⊚JR4	* J – 10	Q410	* F – 12	Q560	* H – 12	RV521	H-11	VCO2	A – 1 0
IC17	B-11	JR5	* J – 1 0	Q411	* F - 12	Q561	* H – 13	R V 5 2 2	J - 1 4		
IC18	C-11	⊚JR6	* J - 1 0	Q413	* E – 12	Q563	* J - 10	R V 5 2 3	J – 1 1	*:SOLDI	ERING SIDE
IC19	A – 13	JR7	* C - 11	Q 4 1 4	* E – 12	Q564	* J - 11	R V 5 2 4	J – 14		
1 C 2 0	C – 8	JR9	* C - 1 1	Q415	* D – 12	Q565	* J – 1 1	R V 5 2 5	H – 10	⊚:EK 0	NLY



DA-63; D/A Converter

RV526 H-9

S 1

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S102 S103

TH1

TP1

TP2

TP3

TP4

TP5

TP6

TP7

TP8

TP9 TP10

TP11

TP201

TP202 G-5

TP203 L-4

TP204 L-5 TP205 L-5 TP206 L-4

TP301 F-10

TP302 E-11

TP303 F-8

TP304 F-12

TP403 E-12

TP404 F-13 TP501 J-8

TP502 K-9 TP503 L-9

TP504 L-12

TP505 K-13 TP506 L-13 TP507 L-13 TP508 J-7 TP509 G-7

TP510 J-8 TP511 G-8

TP512 J-9

TP514 G-13 TP515 G-12

TP516 H-13 TP517 H-12

TP518 J-13

TP519 J-12

TP520 J-13

VCO1 B-10 VCO2 A-10

©:EK ONLY

*: SOLDERING SIDE

TP305 F-8 TP306 F-7 TP401 D-9

A – 7

C – 1 4 D – 1 4

H – 1 4 G – 1 4

F – 14

B – 6

A – 9

A - 10

C-11

A – 12

A – 11

B – 11

B – 11

D - 12

G - 5

C - 7

B - 9

J – 1 2 J –_i 1 3

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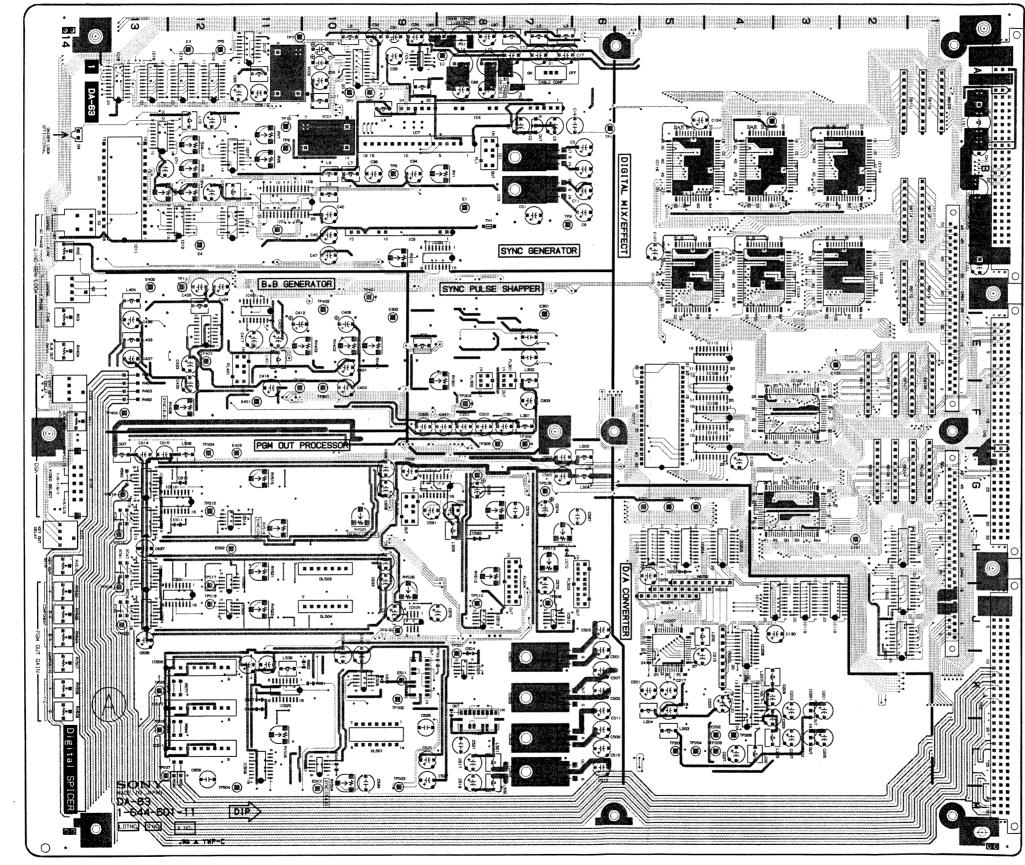
D - 14

E-14

B – 11

J - 5

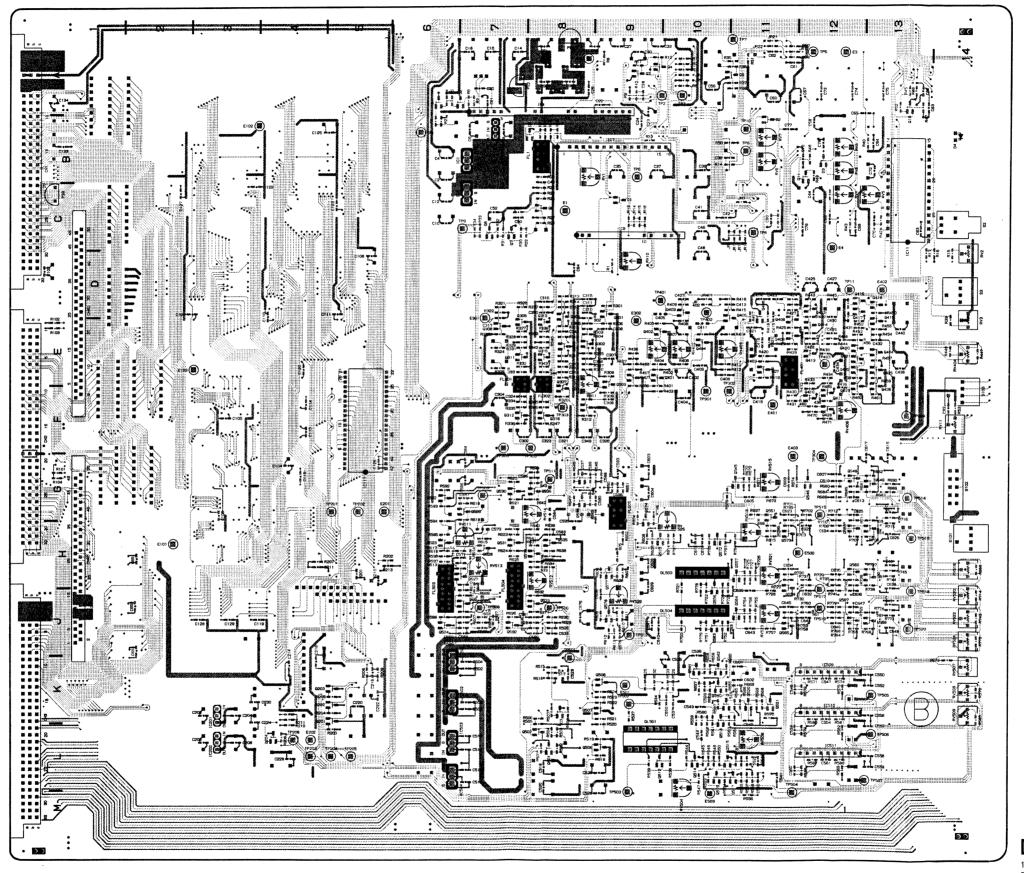
G - 1



DA-63-A SIDE-1-644-601-11 DFS-500/500P

6 - 10

DA-63; D/A Converter



DA-63-B SIDE-1-644-601-11
DFS-500/500P

DA.

CN1 CN2 CN3 CN4 CN5 DL5 DL5

D 1

E 2

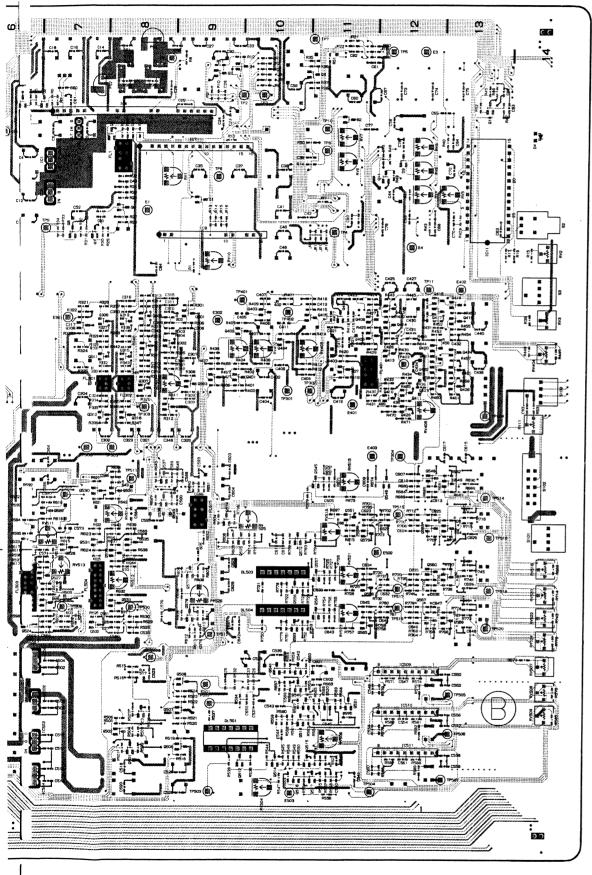
E1(E 2 (E 2 (E3(E3(E4(E4(E4(E5(E5(E5(FL: FL: FL FL! FL! FL FL!

I C : I C : I C :

10

IC.

IC:

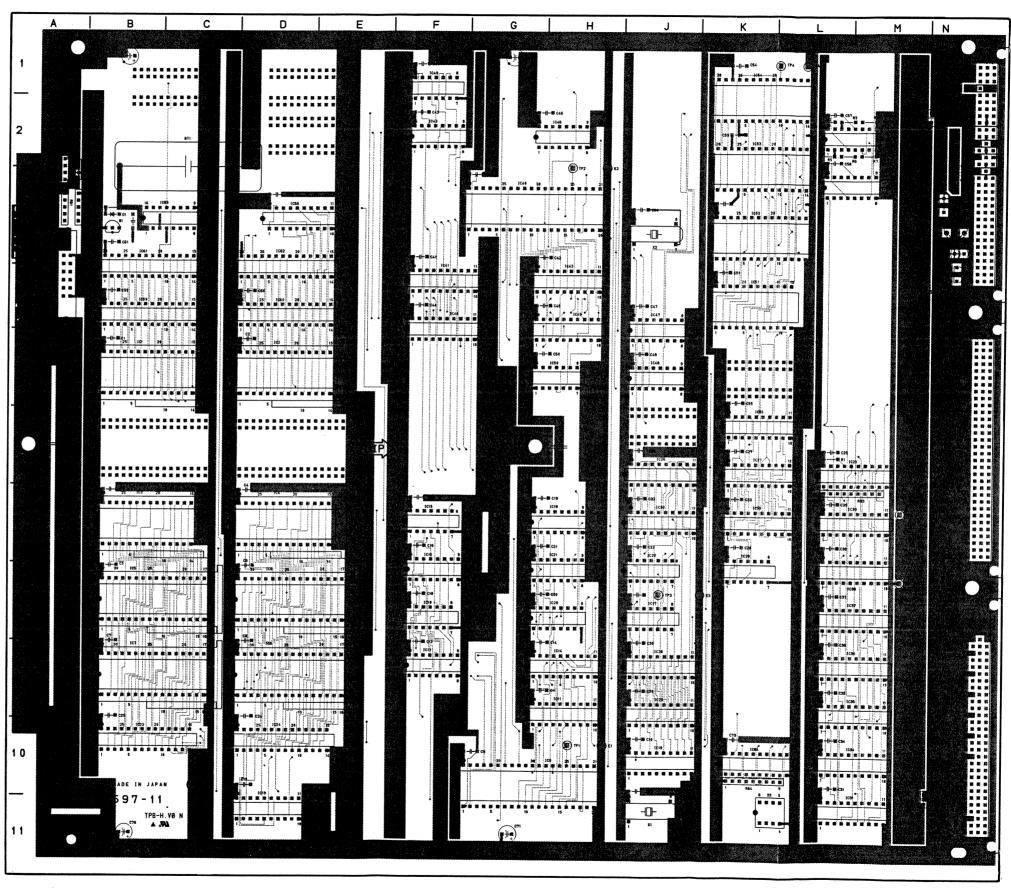


DA-63-B SIDE-1-644-601-11 DFS-500/500P

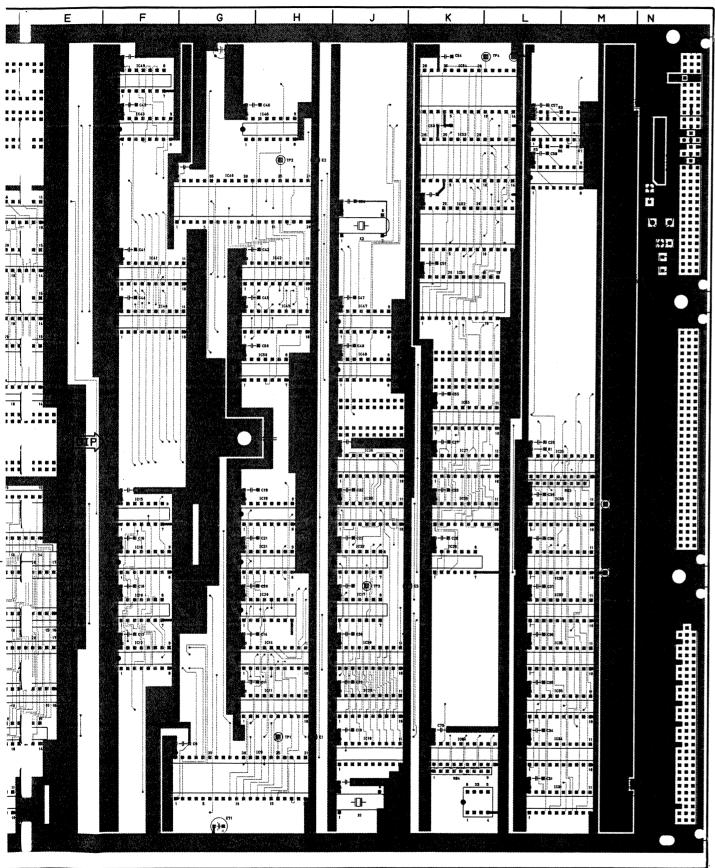
DA - 63	3 (1 - 6 4 4 -	601-11)									
CN1	B – 1	IC101		©J R 1 0	* C - 11	Q416	* D – 12	Q567	* J – 12	R V 5 2 6	H ~ 9
CN2	F – 1	IC102		JR11	* C – 1 1	Q417	* D – 12	Q568	* J – 1 3		
CN3	K – 1	IC103		©JR12	* C – 1 1	Q418	* D – 13	Q572	* H – 10	S 1	A – 7
CN40	H – 1	IC104		JR13	* C – 9	Q419	* D – 13	Q573	* H – 11	S 2	C-14
C N 5 0	D – 1	IC105		©JR14	* C - 9	Q420	* E – 12	Q574	* G - 9	S 3 ''	D – 1 4
		IC108		JR 15	* C - 9	Q421	* E – 12	Q577	* H – 9	S 1 0 1	H – 1 4
DL501		IC109		©JR16	* C – 9	Q422	* E - 12	Q578	* J – 9	S102	G - 1 4
DL503		IC110		JR17	* A – 12	Q423	* F - 12			S103	F – 1 4
DL504	J – 10	IC111		⊚JR18	* A – 12	Q 4 2 4	* E – 13	RB101	A – 1		
		IC112		⊚J R 2 0	* A – 12	Q425	* E - 13	RB102	A – 1	TH1	C-8
D 1	* C – 9	IC114	B – 2	JR21	* A – 1 1	Q426	* E - 13	RB103	A – 1		
D 2	* B – 1 1	IC115	B – 4	⊚J R 2 2	* A – 1 1	Q427	* E - 9	RB104	G – 1	TP1	B - 6
D 3	* B – 12	IC116	B - 5	JR401	* D – 10	Q428	*F-12	RB105	G – 1	TP2	A - 9
D 4	B – 14	IC117	F – 6	©JR402	* D – 10	Q501	* L – 8	RB106	F – 1	TP3	A -1 0
		IC118	J - 3	JR403	* E – 11	Q502	* L – 7			TP4	C-1 1
E 1	C – 8	IC119	J – 3			Q503	* K – 8	RB108	G – 2	TP5	A -1 2
E 2	A – 8	IC201	K – 3	PS1	A – 8	Q506	* L – 8		G - 2	TP6	B - 9
E 3	A - 12	IC202	L - 3	PS2	A – 7	Q507	* K – 8		F – 2	TP7	A -1 1
E 4	D-12	IC203		PS3	C – 1	Q508	* K – 9		F - 2	TP8	B – 1 1
E 1 0 1	H – 2	IC204				Q 5 1 2	* L – 9	RB112		TP9	C - 7
E102	B – 4	IC205		Q 1	* A – 6	Q514	* L – 1 0	RB112	D - 1	TP10	
E103	E - 3	IC206		Q2	* A – 6		* L = 10	RB114	C – 1	TP10	B-11
E 2 0 1	G – 5	IC207		Q3	* A – 9		* L - 10	RB115	C – 1		D -1 2
E 2 0 2	L - 4	10208		Q 4	* A – 10		* L = 1 0			TP201	G -5
E301	D - 7	IC 4 0 1		Q5	* B – 8	Q517 Q518		RB202	H – 4	TP202	G -5
E302	D - 9	IC 4 0 2		Q 6	* C - 8		* L – 10	RB203	J – 4	TP203	L – 4
E 4 0 1	F-11	IC 5 0 1		Q 7	* C - 8 * C - 7		* K – 11	RB204	J – 5	TP204	L - 5
E 4 0 2	D-13	IC 5 0 2		Q8	* C = 7		* K – 11	RB205	K – 4	TP205	L - 5
E 4 0 3	F-11	IC502					* K – 11			TP206	L - 4
E 5 0 1	K – 9			Q 9	* A – 11		* G - 6	RV1	B – 8	TP301	F - 1 O
E 5 0 2		IC504	L – 7	Q 1 0	* B – 13	Q 5 2 3	* H – 6	RV2	D – 14	TP302	E-11
	H-12	IC505	K – 8	Q11	* B – 12	Q 5 2 4	* J - 6		E – 14	TP303	F - 8
E 5 0 3	L – 10	IC506	K – 9	Q 2 0 1	* K – 4	Q525	* H – 9	R V 4	C – 12	TP304	F-12
F1.4	ъ.	IC507		Q 2 0 2	* K – 4		* J – 7	RV5	C - 12	TP305	F - 8
FL1	B – 8	IC508	L-11	Q203	* K – 4	Q527	* H – 7	RV6	B – 11	TP306	F - 7
FL301	E - 7	IC509	K – 13	Q 2 0 4	* L – 4	Q528	* H – 7	R V 7	B ~ 1 1	TP401	D - 9
FL302	E – 8	IC510	K – 13	Q301	* D – 9	Q529	* G – 7	RV8	B – 12	TP403	E-12
FL401	E – 12	IC511	L – 1 3	Q302	* E – 9	Q530	* G - 7	RV9	B – 12	TP404	F-13
F L 5 0 1	L – 8	IC512	J – 7	Q303	* E – 9	Q 5 3 1	* H – 7	R V 1 0	D - 9	TP501	J - 8
FL502	K – 9	IC513	J – 8	Q304	* F – 9	Q532	* J – 7	R V 1 1	F – 14	TP502	K – ∮
FL503	J – 7	IC514	G – 9	Q305	* D – 8	Q533	* J – 8	R V 3 0 1	E - 8	TP503	L - 9
FL504	H – 7	IC516	G – 12	Q306	* E – 8	Q534	* J – 8 * H – 7	©R V 4 0 1	E - 9	TP504	L-12
FL505	G – 9	IC517	G – 13	Q307	* E – 8	Q535	* H – 8	R V 4 0 2	E - 10	TP505	K - 13
		IC518	H – 13	Q308	* E – 7	Q536	* G - 8	©RV403	E - 10	TP506	L - 13
I C 1	B – 8	IC519	H – 13	Q309	* D ~ 7	Q537	* G – 8	R V 4 0 4	E – 14	TP507	L - 13
I C 2	B – 7	IC520	H – 11	Q311	* E – 7	Q538	* G - 8	R V 4 0 6	F – 12	TP508	J - 7
1 C 3	C – 8	I C 5 2 1	H – 12	Q312	* F – 7	Q 5 4 0	* K – 10	R V 5 0 4	L - 10	TP509	G -7
I C 4	B – 8	IC522	H – 13	Q313	* D – 8	Q 5 4 1	* K – 10	R V 5 0 6	L – 11	TP510	J - 8
I C 5	A – 9	IC523	J – 1 1	Q315	* E - 8	Q542	* K – 10	R V 5 0 7	K – 14	TP511	G – 8
IC6	A – 9	IC524	J – 13	Q316	* F – 8	Q545	* G - 11	R V 5 0 8	K – 14	TP512	J - 9
I C 7	B – 9	IC525	K – 1 1	©Q401	* E - 10	Q546	* G - 12	R V 5 0 9	K – 14	TP514	G - 13
IC8	C-10	IC526	J - 9	Q402	* E – 9	Q548	* G - 12	R V 5 1 1	H – 7	TP515	G - 12
I C 9	C – 9	IC601	K – 2	Q403	* D – 10	Q549	* G – 13	R V 5 1 2	H – 8	TP516	H – 13
IC10	A – 11	IC602	J - 2	@Q404	* E - 10	Q 5 5 1	* G – 11	©RV513	H = 7	TP510	
IC11	C-13	IC603	H – 1	©Q405	* D – 11	Q 5 5 3	* H – 12	RV514	H – 8		H - 12
IC12	B - 13			Q406	* D – 11	Q 5 5 4	* H – 13	R V 5 1 4	п – 8 G – 11	TP518 TP519	J – 13
IC13	C-12	JR1	* A – 1 1	©Q407	* E – 11	Q 5 5 6	* J = 10				J – 12
IC14	A – 12	⊚JR2	* A – 10	Q407	* D – 11	Q556 Q557	* H = 11	RV516	H – 14	TP520	J – 13
IC15	A - 12	JR3	* J = 10	Q408 Q409	* E - 11			R V 5 1 8	H-11	V00:	5 4.
IC16	A – 13	⊚JR4	* J = 10	Q409 Q410	* F - 12	Q 5 5 8	* J – 11	RV520	J – 14	VCO1	B - 10
IC 17	B-11	JR5	*J-10			Q560	* H – 12	R V 5 2 1	H-11	VCO2	A – 10
IC 1 8	C-11	⊚JR6	* J = 1 0 * J = 1 0	Q411	* F - 12	Q 5 6 1	* H – 13	R V 5 2 2	J – 14		
IC 1 9	A-13	⊎JR6 JR7	* J - 1 U * C - 1 1	Q 4 1 3	* E - 12	Q 5 6 3	* J – 10	R V 5 2 3	J – 1 1	*:SOLDE	RIN& SIDE
1C 2 0	Č-8	JR9	* C - 1 1 * C - 1 1	Q 4 1 4	* E - 12	Q 5 6 4	* J – 11	R V 5 2 4	J – 14	<u> </u>	
.020	0-0	AU A	- U-II	Q415	* D – 12	Q565	* J – 1 1	R V 5 2 5	H – 10	⊚:EK ON	1 L Y

SY-172; System Control

SY-172(1-644-597-11)								
B T 1	C – 2	IC36	M – 9					
C N I 1 C N I 2 C N I 3 C N I 4 C N I 5 C N I 6 C N I 7 C N I 8 D 1 E 1 E 2 E 3 E 4	B-5 D-5 B-7 D-7 B-8 D-8 B-9 D-9 N-3 N-10 B-3 H-10 H-3 K-8 L-1	IC37 IC38 IC39 IC40 IC41 IC42 IC43 IC45 IC46 IC47 IC48 IC45 IC50 IC51 IC52 IC53 IC55	M-8 M-8 M-7 G-3 F-4 H-4 F-2 F-4 H-2 J-5 F-1 H-5 K-4 K-2 K-1 K-6					
E 5 I C 1 I C 2 I C 3 I C 4 I C 5 I C 6 I C 7 I C 8 I C 9 I C 1 0 I C 1 1 I C 1 2 I C 1 3 I C 1 4 I C 1 5 I C 1 6	M-8 B-5 D-5 B-7 D-7 B-8 D-8 B-9 D-9 H-10 J-10 H-9 F-9 D-10 H-9 F-7 F-7	IC 5 6 IC 5 7 IC 5 8 IC 5 9 IC 6 0 IC 6 1 IC 6 2 IC 6 3 IC 6 4 PS 1 Q 1 RB 1 RB 2 RB 3 RB 4	D-3 M-2 M-3 B-4 D-4 B-3 D-3 C-3 K-10 N-4 B-3 A-3 A-3 M-7 K-10					
IC 17 IC 18 IC 19 IC 20 IC 21 IC 22 IC 23 IC 24 IC 25 IC 26 IC 27 IC 28 IC 29 IC 30 IC 31 IC 32 IC 33 IC 34 IC 35	J - 8 F - 8 H - 7 H - 8 H - 7 J - 7 B - 1 0 D - 1 0 M - 6 J - 6 K - 6 K - 7 J - 9 J - 9 M - 1 1 J - 7 K - 7 M - 1 0 M - 9	S 1 S 2 S 3 TP1 TP2 TP3 TP4 TP5 X 1 X 2	A - 4 A - 3 L - 1 0 H - 1 0 H - 3 J - 8 L - 1 M - 7 J - 1 1 J - 3					

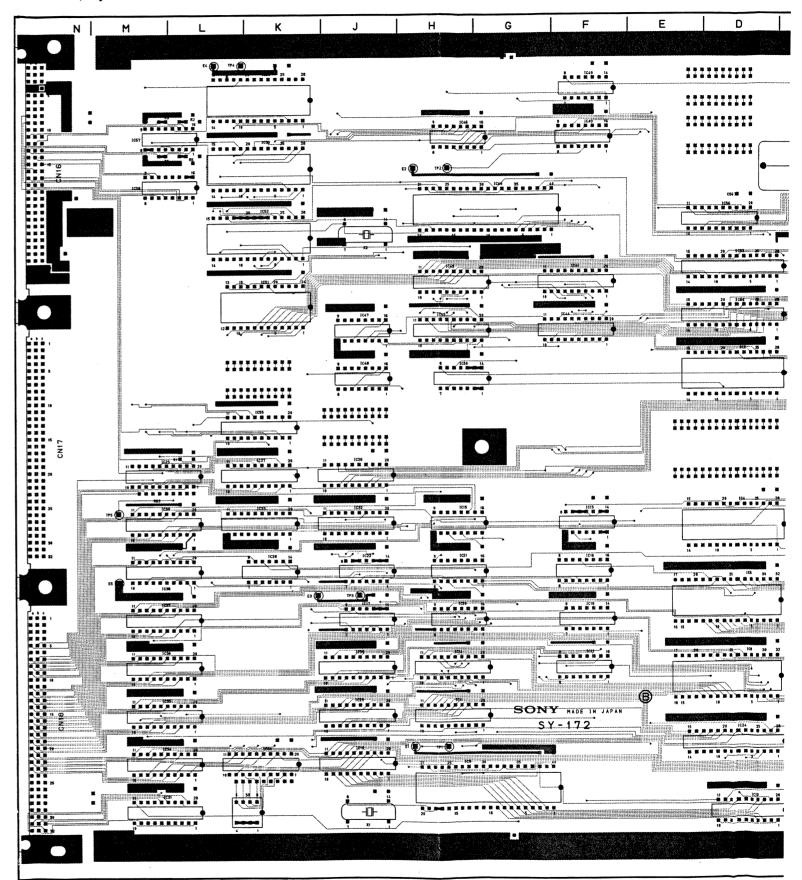


SY-172-A 1-644-597-11 DFS-500/500 P

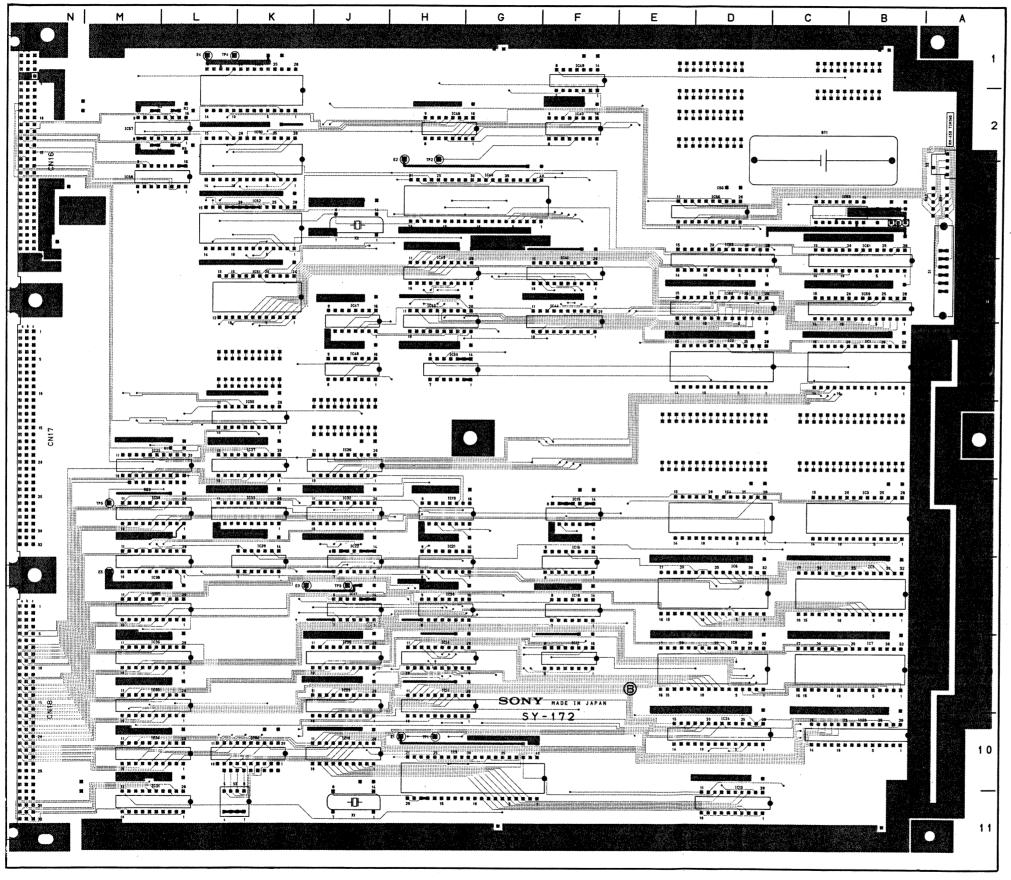


SY-172-A SIDE-1-644-597-11
DFS-500/500P

SY-172; System Control



SY-172; System Control

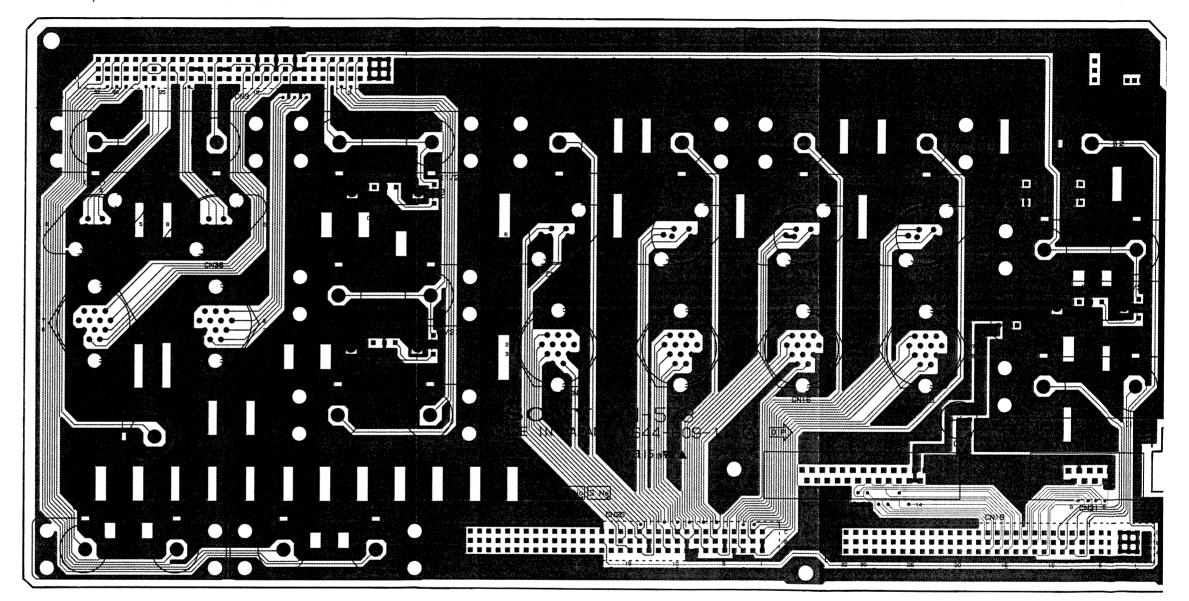


SY-172(1-644-597-11) C - 2 BT1 IC36 M - 9 IC37 M - 8 CNI1 B - 5 IC38 M - 8 CN12 D – 5 IC39 CN13 B - 7 IC40 G - 3CN14 D - 7 IC41 F – 4 CN15 B – 8 IC 42 H – 4 CN16 D - 8 IC43 CN17 B ~ 9 IC44 F _ 4 CN18 D - 9 IC45 H – 4 IC 46 H = 2CN16 N-3IC47 CN18 N - 10 IC48 J - 5IC49 F - 1 B – 3 IC50 H - 5 IC51 K – 4 E 1 H - 10 IC52 K – 3 F2 H - 3IC53 K – 2 E 3 IC54 K - 1 F 4 1 - 1 IC55 K - 6E 5 M - 8 IC56 D-3IC57 M-2I C 1 B - 5 IC58 M - 31 C 2 D - 5 LC 5.9 B _ 4 IC3 B - 7 IC60 D - 4 IC4 D – 7 IC61 B - 3I C 5 B - 8IC62 D - 3 IC6 D – 8 IC63 C = 3IC7 B = 9IC64 K - 10 IC8 D - 9 LC 9 H - 10PS1 N – 4 IC10 IC11 H - 9 Q 1 B - 3 IC12 LC 13 D - 10RB1 A - 3IC14 H – 9 RB2 A – 3 IC15 F - 7 RB3 M _ 7 IC16 F – 7 K-10 IC17 J – 8 IC18 F - 8 S 1 A – 4 IC19 H – 7 A - 3 S 2 IC20 H - 8 L - 10 IC21 H-7IC22 J - 7 TP1 H - 10IC23 B - 10 TP2 H = 3IC24 D - 10TP3 J – 8 IC25 M - 6 TP4 L - 1 IC 26 J - 6 TP5 M – 7 IC27 K - 6 J - 11 X 1 IC28 K – 7 X 2 J - 3 IC29 J – 9 IC30 J = 9IC31 M - 11LC 3 2 .1 - 7 IC33 K – 7 IC34 M - 10IC35 M - 9

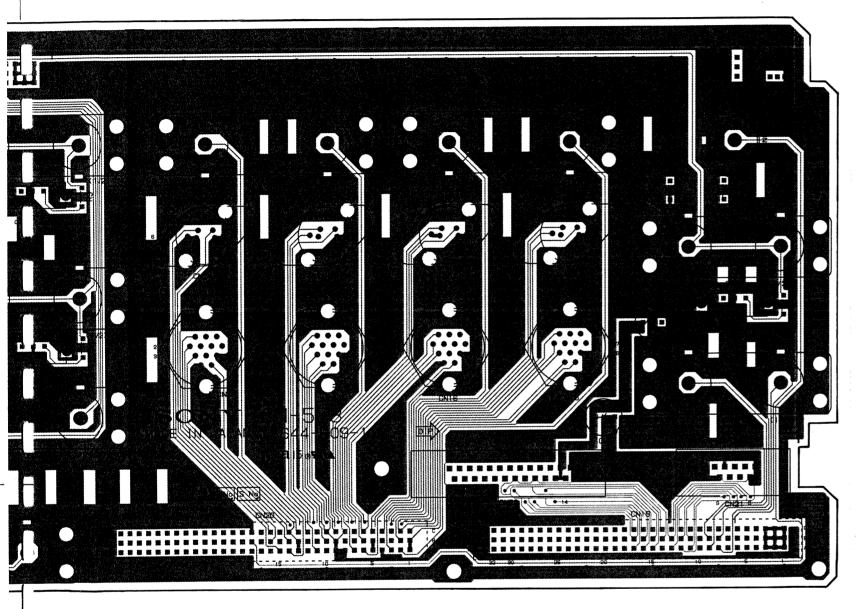
SY-172-B SIDE-1-644-597-11
DFS-500/500P

CN-573; Rear Panel Connector

CN-573(1-644-609-11)							
CN1	E – 3						
CN3	* A – 1						
CN4	E - 2						
CN6	E – 1						
CN7	D – 2						
CN9	C - 2						
CN11	D – 2						
CN12	D – 2						
CN13	C - 2						
CN14	C - 2						
CN15	D – 3						
CN16	D - 3						
CN17	C - 3						
CN18	C – 3						
CN19	* D – 5						
CN20	* C – 5						
C N 21	C – 4						
C N 2 2	D – 4						
C N 23	B – 4						
CN25	B – 3						
CN27	B – 2						
CN29	B – 5						
CN31	A – 5						
CN33	A – 4						
CN34	A – 2						
CN36	A – 2						
CN37	A – 2						
CN38	A – 3						
CN39	A – 3						
CN40	* E – 1						
S 1	E – 3						
S 2	B - 3						
S 3	B – 2						
*:SOL	DERING	SIDE					

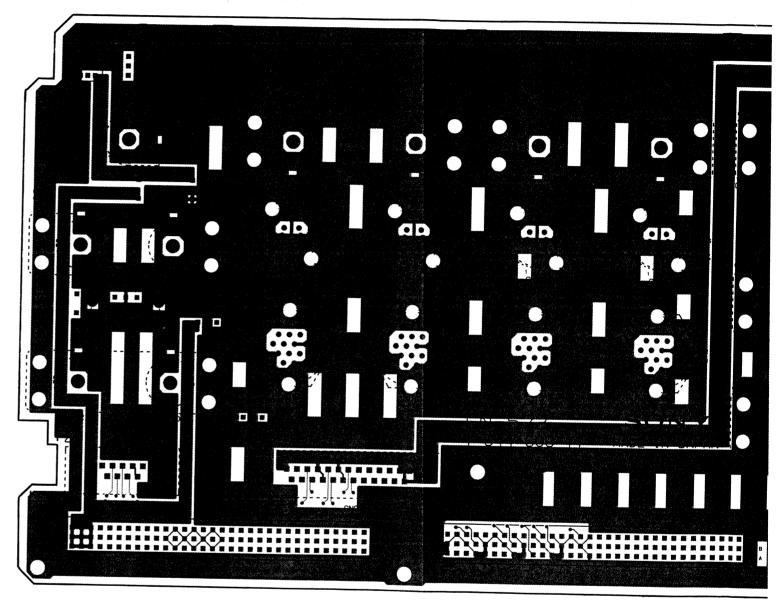


CN-573 -A SIC



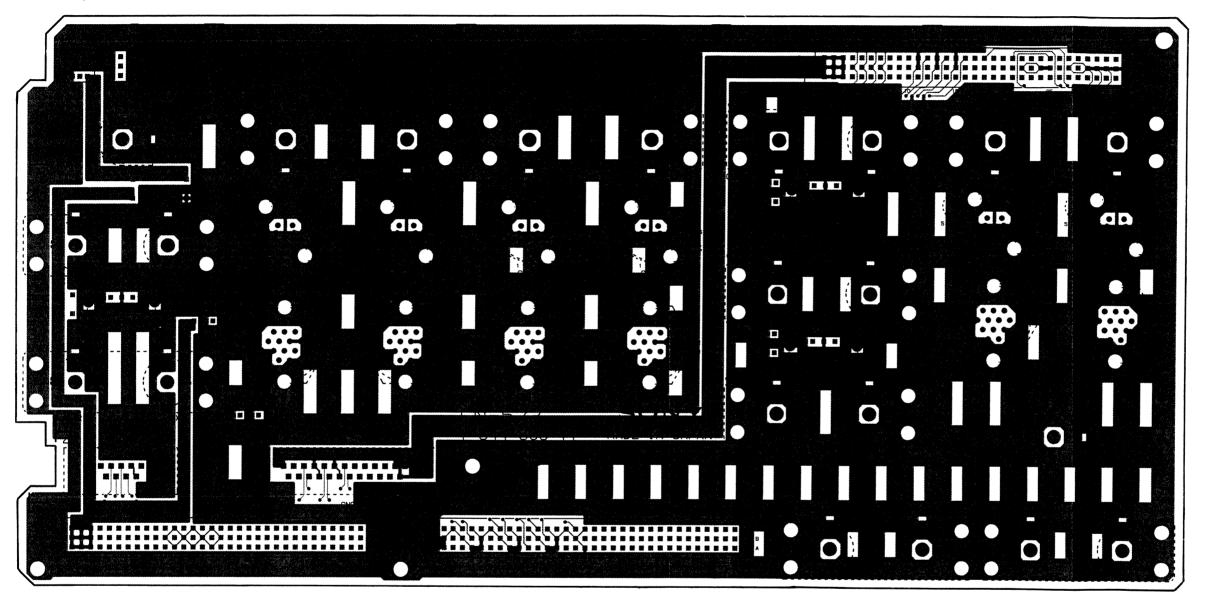
CN-573 -A SIDE-1-644-609-11 DFS-500/500P

CN-573; Rear Panel Connector



INIT CN - 573

CN-573; Rear Panel Connector

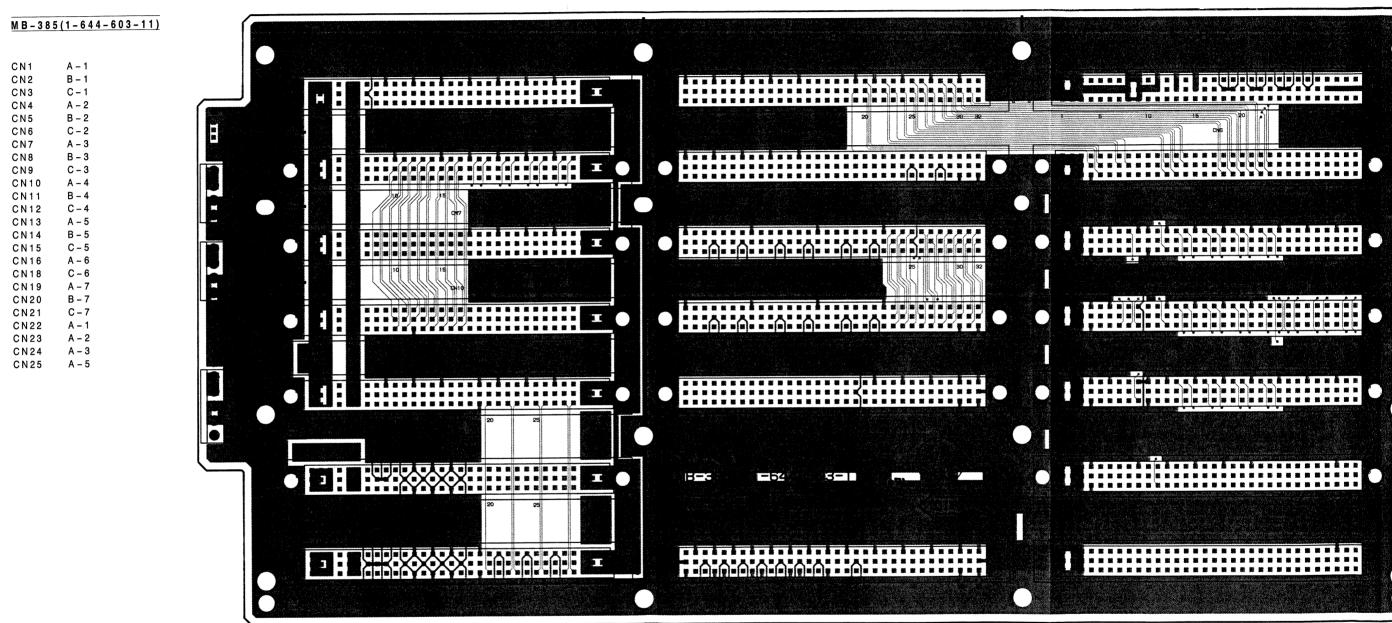


CN-573(1-644-609-11) CN1 E – 3 CN3 * A – 1 E - 2 CN4 CN6 E – 1 CN7 D – 2 CN9 C – 2 CN11 D - 2 CN12 D – 2 CN13 C – 2 CN14 C - 2 CN15 CN16 D-3CN17 C - 3 CN18 C - 3 CN19 * D – 5 CN20 * C - 5 CN21 CN22 D – 4 CN23 CN25 B - 3 CN27 CN29 B - 5CN31 CN33 A – 4 CN34 A – 2 CN36 A - 2 CN37 A – 2 CN38 A – 3 CN39 A – 3 CN40 * E - 1 E - 3 S 2 B – 3 B - 2 *:SOLDERING SIDE

CN-573 -B SIDE-1-644-609-11 DFS-500/500P

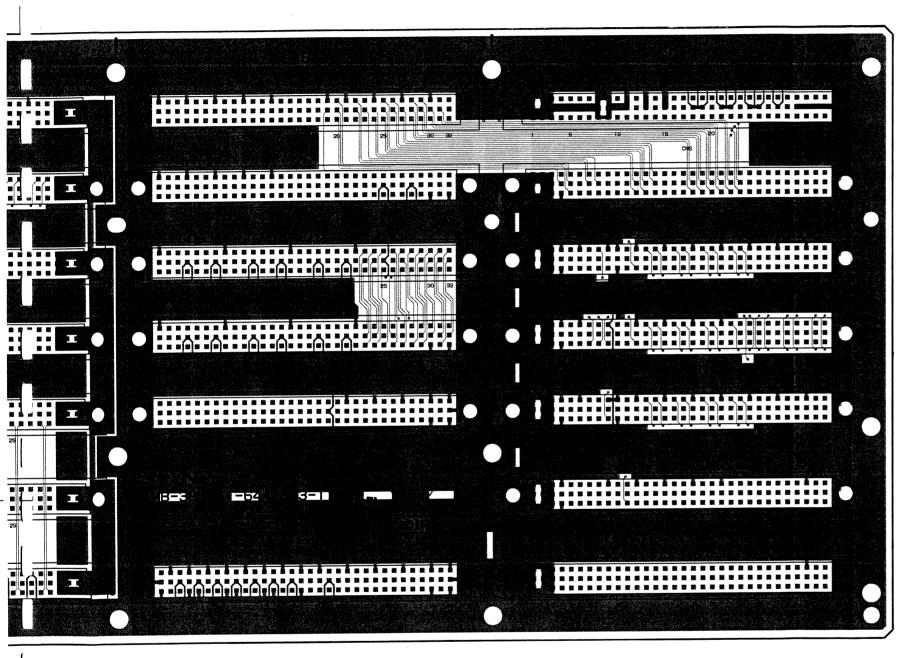
6 – 1 5

MB-385; Mother Board



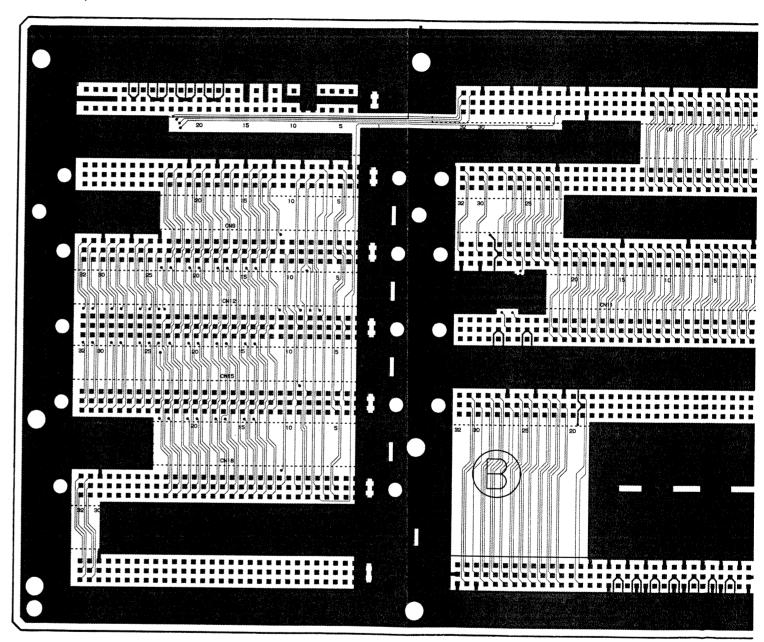
MB-385 - A SI

DFS-500/500P



MB-385-A SIDE-1-644-603-11 DFS-500/500P

MB-385; Mother Board



MB-385(1-644-603-11)

A – 1

B – 1

C - 1

A – 2

B - 2

C - 2

A - 3

B - 3

C - 3

A - 4

B – 4

C - 4

A – 5

B ~ 5

C - 5

A - 6

C - 6

A - 7

B - 7

C - 7

A – 1

A - 2

A – 3

A – 5

CN2

CN3

CN4

CN5

CN6

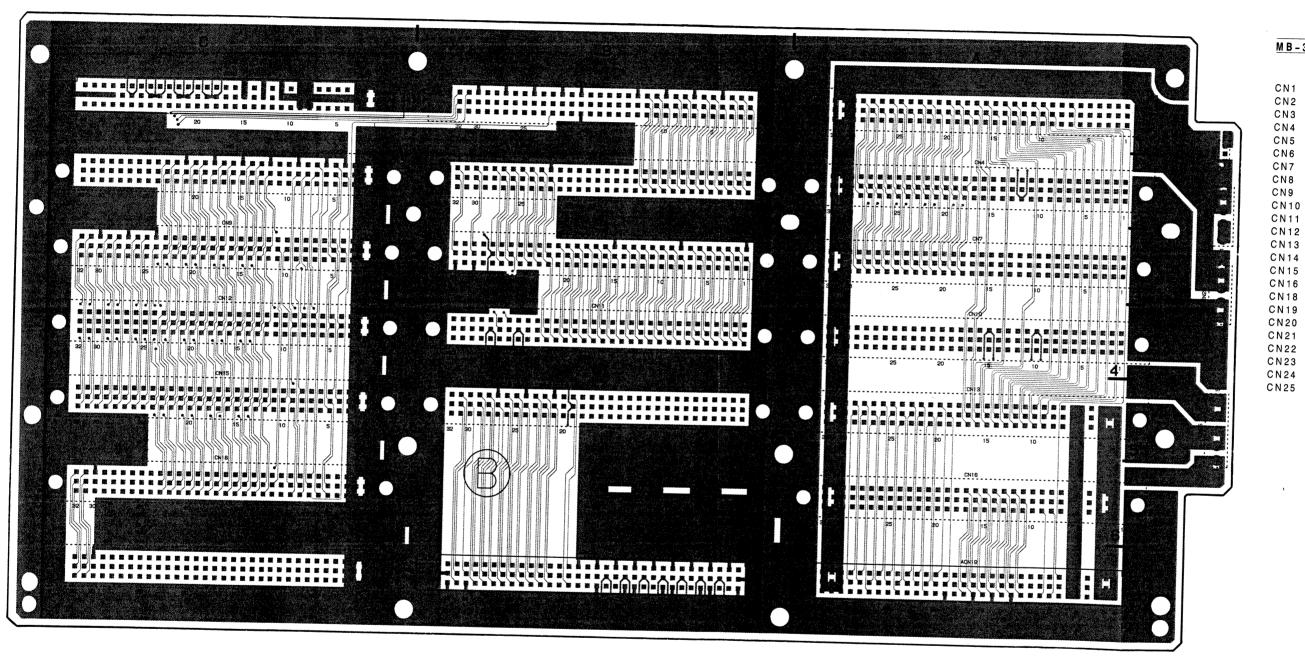
CN7

CN8

CN9

MB-385; Mother Board

b – 17

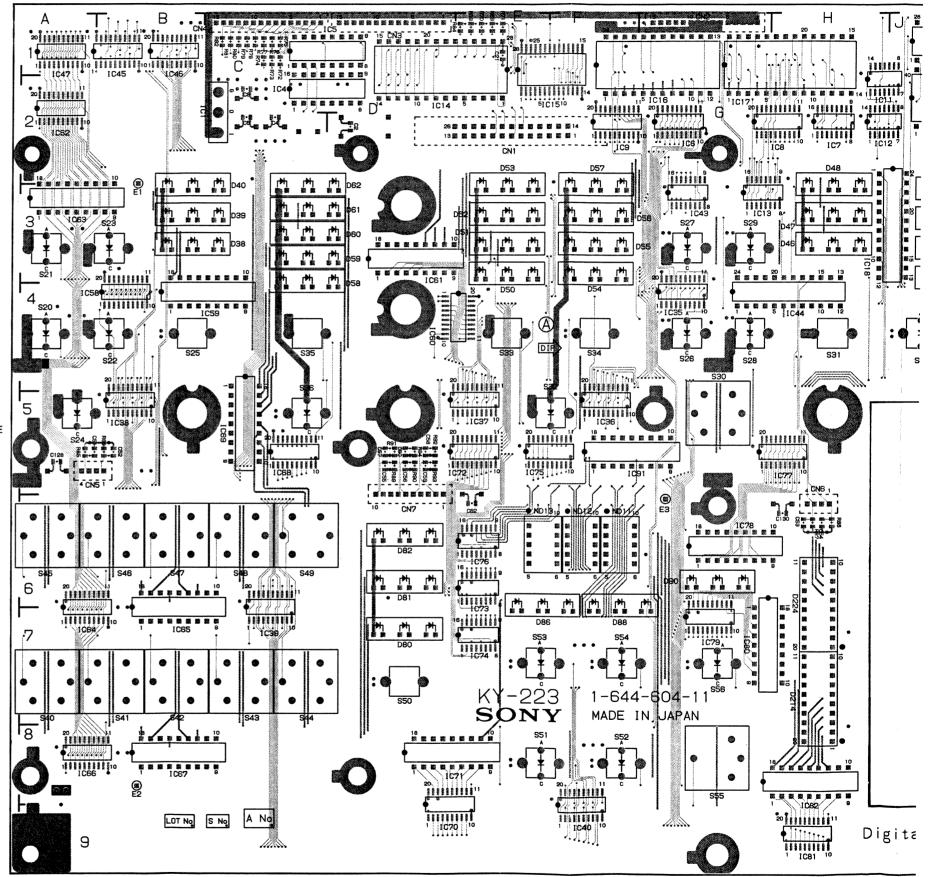


MB-385 -B SIDE-1-644-603-11 DFS-500/500P

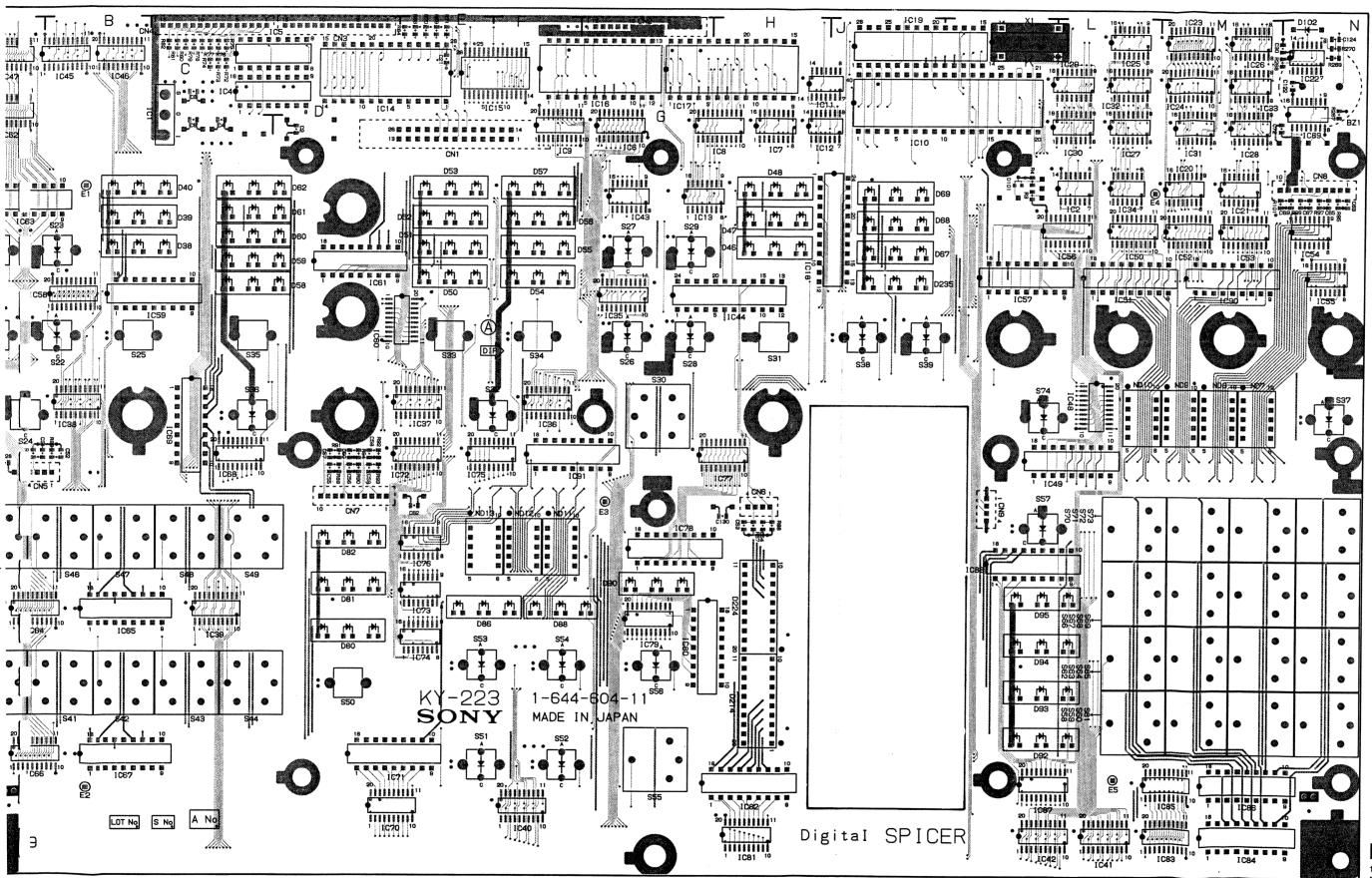
6 - 17

KY-223; Function Key

K Y – 22	3 (1 – 644 -	- 6 0 4 - 1 1)						A T;
B Z 1	* M – 2	I C 6	G - 2	I C 6 9	C – 5	S 4 9	C – 6	1
		I C 7	H – 2	I C 7 0	E – 8	S 5 0	D – 7	1647 1° IC45
C N I 1 4	* D – 2	I C 8	H - 2	I C 7 1	E – 8	S 5 1	E – 8	
		I C 9	F – 2	IC72	E - 5	S 5 2	F – 8	20
CN1	* E - 2	IC10	J – 2	IC73	E – 7	S 5 3	E – 7	_ t
CN2	* H – 1	IC 1 1	H – 2 H – 2	1 C 7 4 1 C 7 5	E – 7 E – 5	S 5 4 S 5 5	F – 7 G – 8	2111111111111111
CN3 CN4	* E – 1 * C – 1	IC12 IC13	G – 3	1 C 7 6	E - 6	S 5 6	G = 7	1062
CN4 CN5	* A – 5	IC 14	* D - 2	1070	H – 5	S 5 7	K – 5	100 mm m m m m m m m m m m m m m m m m m
CN6	* H – 6	IC 15	F - 2	1 C 7 8	G – 6	S 5 8	L – 7	
CN7	* D – 5	IC 16	G - 2	IC79	G – 7	S 5 9	L – 7	18 2 2 2 2 2 2 2 2 2 2
CN8	* N – 3	IC 17	G - 2	I C 8 0	G – 7	S 6 0	L – 7	
CN9	* K – 6	IC 18	H – 3	I C 8 1	H – 9	S 6 1	L – 7	
		IC 19	J – 1	I C 8 2	H – 8	S 6 2	L - 7	3 , 1063 523
D 3 8	C – 3	IC 2 0	M – 2	IC83	M – 9	S 6 3	L – 7	
D 3 9	C – 3	IC 2 1	M – 3	I C 8 4	M – 9	S 6 4	L – 7	ITTPMT
D 4 0	C – 3	1 C 2 2	N – 1	1 C 8 5	M – 8	S 6 5 S 6 6	L – 7 L – 7	C. C.
D 4 6 D 4 7	H – 3 H – 3	1 C 2 3 1 C 2 4	M – 1 M – 2	1 C 8 6 1 C 8 7	M – 8 K – 8	S 6 7	L – 7 L – 7	
D 4 7	п – 3 Н – 2	IC 2 4	L – 1	1 C 8 8	K – 6	S 6 8	L - 7	4 IC58 2222
D 5 0	E – 4	1 C 2 6	M – 1	I C 8 9	N – 2	S 6 9	L - 7	S20 •
D 5 1	E – 3	I C 2 7	L – 2	I C 9 0	M – 4	S 7 0	L – 6	
D 5 2	E – 3	IC28	M - 2	I C 9 1	G – 5	S 7 1	L – 6	INTPOT
D 5 3	E – 2	IC29	L - 1			S 7 2	L – 6	
D 5 4	F – 4	IC30	L – 2	ND7	M – 4	S 7 3	L – 6	S22
D 5 5	G – 3	I C 3 1	M – 2	ND8	M – 4	S 7 4	K – 4	20 11
D 5 6	G – 3	IC32	L – 2	ND9	M – 4			
D 5 7	F - 2	IC33	M – 2	ND10	L - 4	X 1	K – 1	15 III
D 5 8 D 5 9	D – 3 D – 3	I C 3 4 I C 3 5	L – 3 G – 4	N D 1 1 N D 1 2	F – 6 F – 6	1102.*	DERING SIDE	11C3
D 6 0	D – 3	1035	F - 5	ND12	E – 6		DETITIO OTDE	S24 -8 -8 -
D 6 1	D - 3	I C 3 7	E – 5		_ •			C128 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
D 6 2	D – 3	IC38	B - 5	PS1	* D – 2			
D 6 7	J – 3	IC39	C - 7					4 CN5 T
D 6 8	J – 3	IC 40	F – 9	S 2 0	A – 4			—
D 6 9	J – 3	I C 4 1	L – 9	S 2 1	A – 3			
D 8 0	D - 7	I C 4 2	K – 9	S 2 2	B - 4			
D 8 1	D – 6 D – 6	I C 4 3 I C 4 4	G – 3 H – 4	S 2 3 S 2 4	B – 3 A – 5			
D 8 2 D 8 6	E - 7	1044	B - 1	S 2 5	B – 4			
D 8 8	F - 7	IC 4 6	B - 1	S 2 6	G – 4			S45 S4
090	G – 6	I C 4 7	A - 1	S 2 7	G – 3			6 2
D 9 2	K – 8	IC48	L - 5	S 2 8	G – 4			
D 9 3	K – 7	IC 49	K – 5	S 2 9	G – 3			• • • • • • • • • • • • • • • • • • • •
D 9 4	K – 7	IC 5 0	L – 3	S 3 0	G – 4			1C64
D 9 5	K – 7	IC 5 1	L – 4	S 3 1	H – 4			
D 1 0 1	K – 2	1 C 5 2	M - 3	S 3 2	F – 4			
D102	N – 1	IC 5 3	M – 3	S 3 3 S 3 4	E – 4 F – 4			
D 2 1 4 D 2 2 4	H – 7 H – 6	I C 5 4 I C 5 5	N – 3 N – 4	S 3 4 S 3 5	F – 4 C – 4			
D 2 3 5	J – 3	IC 5 6	L - 3	S 3 6	C – 5		-	
E 1	B – 3	IC 5 7	K – 4	S 3 7	N – 5			SAO SAO
E 2	B – 8	IC 5 8	A - 4	S 3 8	J – 4			
E 3	G – 6	IC 5 9	C - 4	S 3 9	J – 4			8 2 20 11 11 11
E 4	L - 3	IC 60	D - 4	S 4 0	A – 7			
E 5	L – 8	I C 6 1	D - 3	S 4 1	B - 7			IC66
	_	I C 6 2	A - 2	S 4 2	B - 7			
I C 1	B – 2	IC 6 3	A - 3	S 4 3	C-7			
I C 2	L – 3	IC 6 4	A – 7	S 4 4	C – 7			
I C 3	* K – 3	1C65	B – 7 A – 8	S 4 5 S 4 6	A – 6 B – 6			
I C 4 I C 5	C – 2 D – 1	1 C 6 6 1 C 6 7	A – 8 B – 8	S 4 6 S 4 7	B – 6			9
	וייט	I C 6 8	C-5	S 4 8	C-6			
		. 5 0 0		2.0	- •			

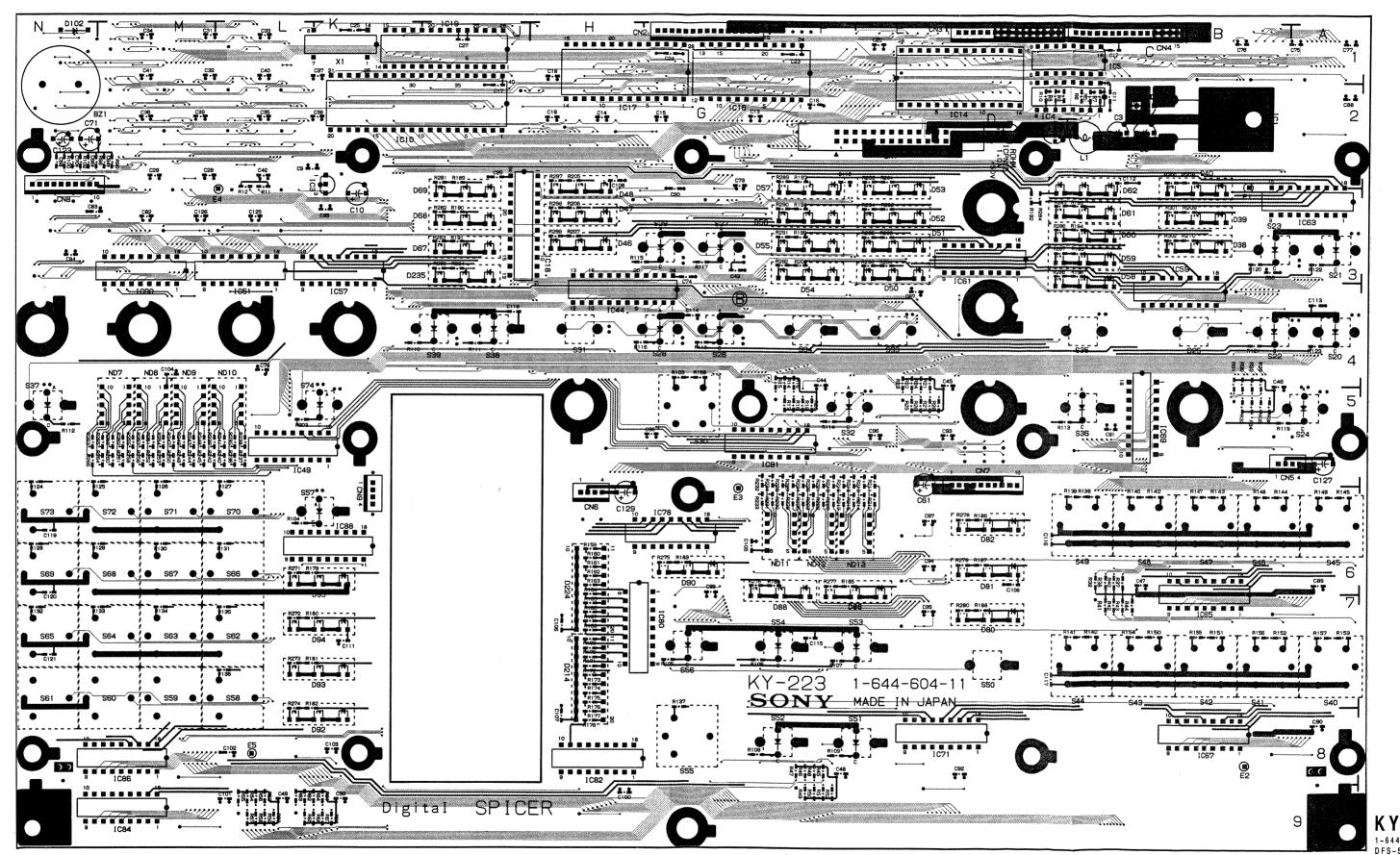


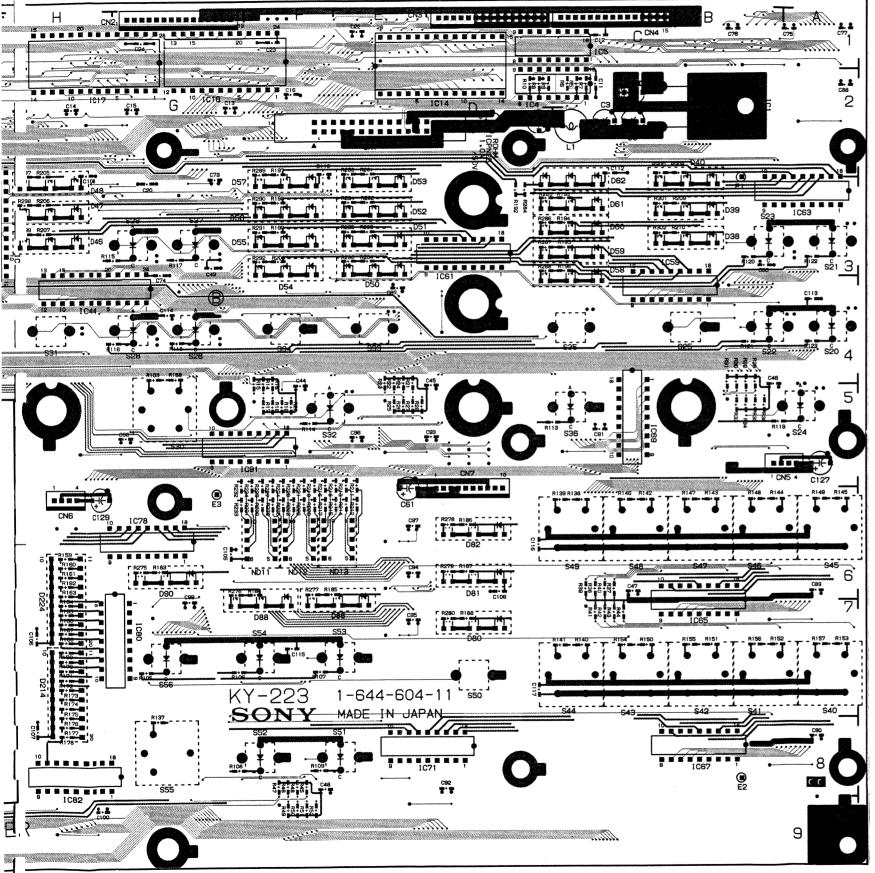
2 ; Function Key



KY-223-A SIDE-1-644-604-11 DFS-500/500P

KY-223; Function Key

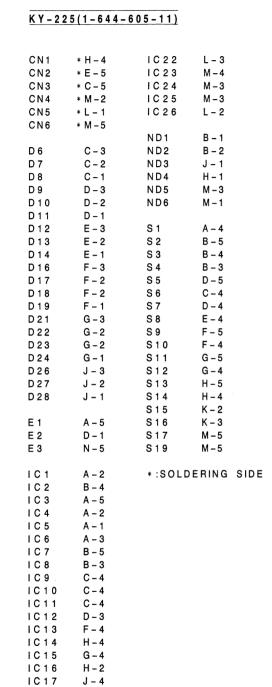


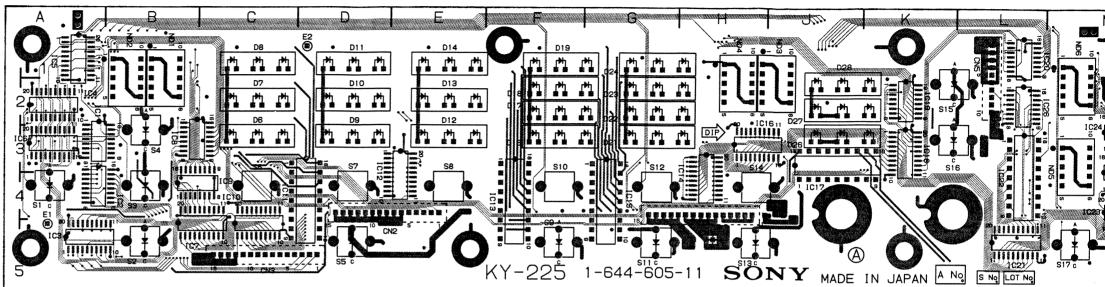


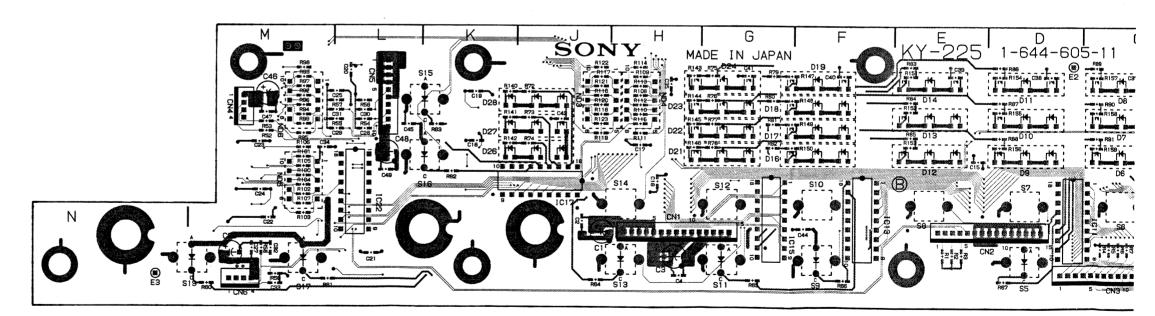
K Y - 22	3 (1 – 6 4 4	-604-11)					
B Z 1	* M – 2	I C 6	G – 2	I C 6 9	C – 5	S 4 9	C - 6
CNI14	* D - 2	I C 7 I C 8	H – 2 H – 2	I C 7 0 I C 7 1	E – 8 E – 8	S 5 0 S 5 1	D – 7 E – 8
	_	IC9	F – 2	I C 7 2	E - 5	S 5 2	F – 8
CN1	* E – 2	IC 10	J – 2	I C 7 3	E - 7	S 5 3	E - 7
CN2	* H – 1	IC 11	H – 2	IC74	E - 7	S 5 4	F - 7
CN3	* E - 1	IC 12	H – 2	IC75	E - 5	S 5 5	G – 8
CN4	* C – 1	IC 13	G-3	1 C 7 6 1 C 7 7	E – 6 H – 5	S 5 6 S 5 7	G – 7 K – 5
CN5 CN6	* A – 5 * H – 6	I C 1 4 I C 1 5	* D – 2 F – 2	1 C 7 7	G – 6	S 5 8	L – 7
CN7	* D – 5	IC 16	G-2	1 C 7 9	G – 7	S 5 9	L - 7
CN8	* N – 3	I C 1 7	G-2	1080	G - 7	S 6 0	L - 7
CN9	* K – 6	IC 18	H - 3	I C 8 1	H – 9	S 6 1	L - 7
	•	IC 19	J – 1	I C 8 2	H – 8	S 6 2	L - 7
D38	C - 3	IC20	M-2	IC83	M – 9	S 6 3	L - 7
D39	C - 3	I C 2 1	M - 3	IC84	M – 9	S 6 4	L - 7
D 4 0	C - 3	1 C 2 2	N – 1	IC85	M – 8	S 6 5	L - 7
D 4 6	H – 3	IC23	M – 1	IC86	M – 8	S 6 6	L – 7
D 4 7	H – 3	IC24	M – 2	IC87	K – 8	S 6 7	L – 7
D 48	H – 2	1 C 2 5	L – 1	I C 8 8	K – 6	S 6 8	L – 7
D 5 0	E – 4	I C 2 6	M – 1	IC89	N – 2	S 6 9	L – 7
D 5 1	E - 3	IC 27	L – 2	IC90	M – 4	S 7 0	L – 6
D 5 2	E - 3	1 C 2 8	M-2	I C 9 1	G – 5	S 7 1	L - 6
D 5 3	E - 2	I C 2 9	L – 1	ND7		S 7 2	L – 6
D 5 4	F - 4	IC30	L - 2	ND7	M – 4	S 7 3	L - 6
D 5 5	G - 3	1031	M – 2	ND8	M – 4	S 7 4	K – 4
D 5 6	G – 3 F – 2	1 C 3 2 1 C 3 3	L – 2 M – 2	ND9	M – 4 L – 4	X 1	K – 1
D 5 7 D 5 8	D - 3	1 C 3 4	L – 3	N D 1 0 N D 1 1	F - 6	^ 1	K = 1
D 5 9	D - 3	1034	G – 4	ND11	F – 6	* .801	DERING SID
D 6 0	D - 3	1 C 3 6	F - 5	ND13	E - 6		DETING OID
D 6 1	D – 3	1 C 3 7	E – 5				
D 6 2	D – 3	IC38	B – 5	PS1	* D – 2		
D 6 7	J – 3	1 C 3 9	C-7				
D 68	J – 3	IC 40	F – 9	S 2 0	A – 4		
D69	J - 3	IC 41	L – 9	S 2 1	A – 3		
D80	D – 7	1 C 4 2	K – 9	S 2 2	B – 4		
D 8 1	D – 6	1 C 4 3	G – 3	S 2 3	B – 3		
D 8 2	D – 6	IC 4 4	H – 4	S 2 4	A – 5		
D 8 6	E - 7	I C 4 5	B – 1	S 2 5	B – 4		
D 8 8	F - 7	IC 4 6	B – 1	S 2 6	G – 4		
D 9 0	G - 6	1 C 4 7	A – 1	S 2 7	G – 3		
D 9 2	K – 8	1 C 4 8	L – 5	S 2 8	G – 4 G – 3		
D 9 3 D 9 4	K – 7 K – 7	I C 4 9 I C 5 0	K – 5 L – 3	S 2 9 S 3 0	G - 4		
D94	K – 7	IC 5 1	L - 3 L - 4	S 3 1	H – 4		
D101	K – 2	1 C 5 2	M – 3	S 3 2	F – 4		
D102	N – 1	IC 5 3	M - 3	833	E – 4		
D214	H – 7	I C 5 4	N – 3	S 3 4	F – 4		
D 2 2 4	H – 6	1 C 5 5	N – 4	S 3 5	C – 4		
D 2 3 5	J - 3	IC 5 6	L - 3	S 3 6	C - 5		
E 1	B - 3	IC 57	K – 4	S 3 7	N – 5		
E 2	B – 8	IC58	A – 4	S 3 8	J – 4		
E 3	G – 6	IC 59	C – 4	S 3 9	J – 4		
E 4	L - 3	IC 60	D – 4	S 4 0	A – 7		
E 5	L – 8	IC 61	D – 3	S 4 1	B – 7		
		I C 6 2	A – 2	S 4 2	B – 7		
IC1	B - 2	IC 63	A – 3	S 4 3	C – 7		
1 C 2	L - 3	IC 6 4	A – 7	S 4 4	C – 7		
1 C 3	* K – 3	IC 6 5	B – 7	S 4 5	A – 6		
I C 4 I C 5	C – 2 D – 1	IC 6 6	A – 8 B – 8	S 4 6	B – 6		
103	<i>U</i> = 1	1 C 6 7 1 C 6 8	C – 5	S 4 7 S 4 8	B – 6 C – 6		
		1000	J – J	0 4 0	J – J		

KY-223-B SIDE-

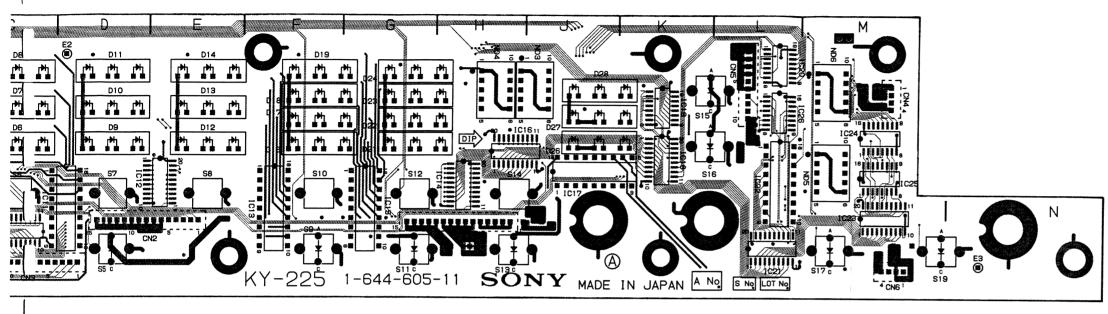
K Y - 2 2 5; S witch



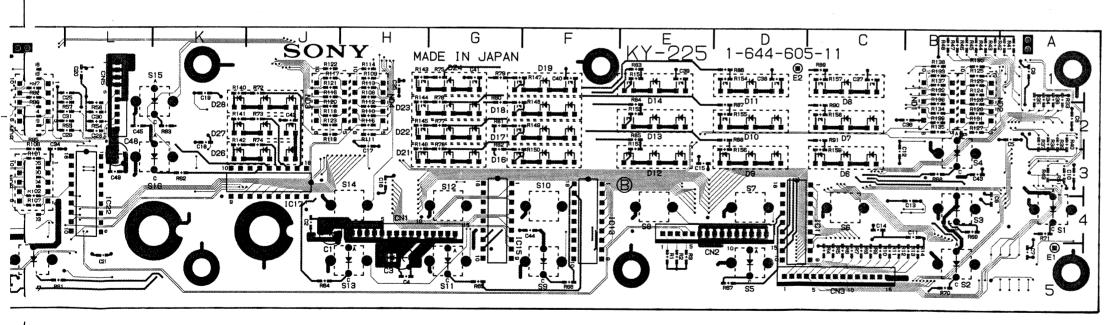




IC18 IC19 IC20 IC21

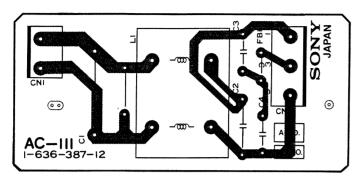


K Y - 2 2 5 - A SIDE-1-644-605-11 DFS-500/500P

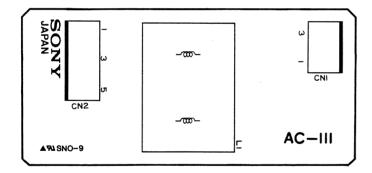


KY-225-B SIDE-1-644-605-11 DFS-500/500P

AC-111; Line Filter (For Ek)

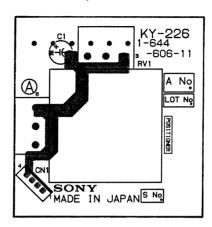


AC-111-A SIDE-1-636-387-12 DFS-500P

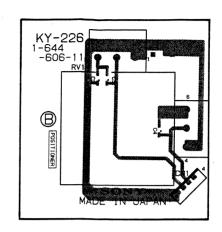


A C - 111 - B SIDE-1-636-387-12 DFS-500P

KY-226; Positioner

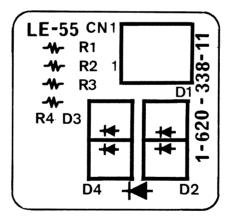


KY-226-A SIDE-1-644-606-11 DFS-500/500P

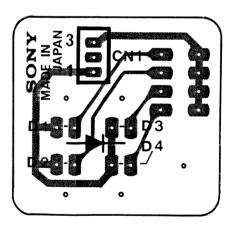


KY-226-B SIDE-1-644-606-11 DFS-500/500P

LE-55; Power Indicator

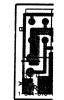


LE-55 -A SIDE-1-620-338-11 DFS-500/500P



LE-55-B SIDE-1-620-338-11 DFS-500/500P

V R - ·



VR – 1-644-6 DFS-50C





VR-1-644-6 DFS-500

VR-1

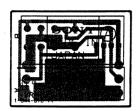


VR-1-644-6 DFS-500

VR-135; Location Control

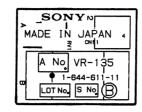
; Title Control

;DSK(Down Stream Keyer)Control



VR-135-A SIDE-

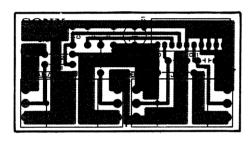
1-644-610-11 DFS-500/500P



VR-135-B SIDE-

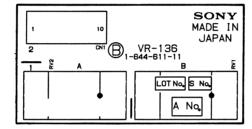
1-644-610-11 DFS-500/500P

VR-136; Edge/Trail/Shadow Control



VR-136-A SIDE-

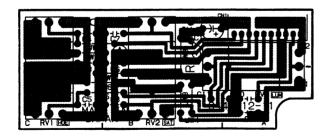
1-644-611-11 DFS-500/500P



VR-136-B SIDE-

1-644-611-11 DFS-500/500P

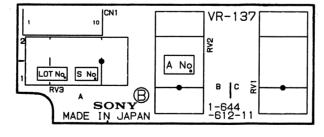
VR-137; Mattes/BKGD Control



VR-137-A SIDE-

1-644-612-11 DFS-500/500P

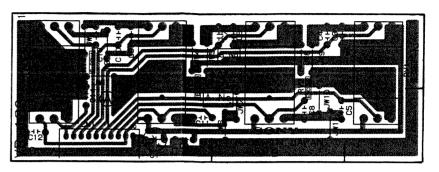
'E'



VR-137-B SIDE-

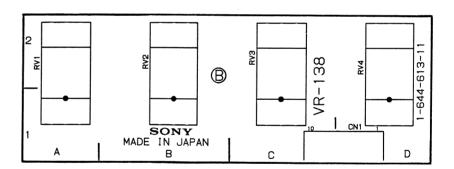
1-644-612-11 DFS-500/500P

VR-138; Effect Control



VR-138-A SIDE-

1-644-613-11 DFS-500/500P



VR-138-B SIDE-

1-644-613-11 DFS-500/500P

SECTION 7 SEMICONDUCTOR PIN ASSIGNMENTS

ここに記載されているIC, トランジスタ, ダイオードは, それぞれの機能を等価的に表したものです。したがって互換性を表すものではありません。(互換性のない型名が併記されている事もあります。) 部品の交換をする時は, SPARE PARTSの章を参照して、ださい。

Os, transistors and diodes of which functions are equivalent are described here. Therefore, incompatible device names may e described together. For parts replacement, refer to the Spare Parts section in this manual.

IC	PAGE	IC	PAGE	IC	PAGE	IC	PAGE
4F00PC	7-2	LM1881M	7-22	SN74ALS32N	7-2	SN74LS74ANS	7-29
4F08PC		LM311PS		SN74ALS374A	AN7-29	TA7805S	7-34
74F32PC		LM358PS		SN74ALS574E	3NS7-29	TC4584BF	7-34
74F399PC		LM6361M		SN74ALS74AI	N7-29	TC4S66F	7-35
7 41 5551 6				SN74HC00AN	S7-29	TC74HC191AF	7-35
M26LS31PC	7.2	M27C4001-12F1	7-22		S7-29	TC74HC221AF	
AM26LS32PC		M51271FP			7-29	TD62083AP	7-35
AIVIZOESSZI C		MAX691CPE			S7-30	TL082CPS	7-36
- X-1040	7-2	MBM27C256A-			S7-30	TMS27C512-20	JL7-35
X-1291		25CZ-X	7-24	-	S7-24		
X-1356		MC14052BF			NS7-30	UPC1037HA	7-36
BX-1461		MC74HC113F			NS7-30	UPC311G2	
DA-1401	/-3	MC74HC154N			NS7-30	UPD7004C	
(V00017	7.2	WC/400154N			NS7-30	UPD71059C	
X22017		N74F377N	7-24		NS7-31	0,0,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
X23043		NJM13700M		SN74HC20AN		XRA17809T	7-36
' CXA1106M		NJM2233BM		SN74HC21AN		7(17170001	
CXA1260Q-Z					NS7-31	TRANSISTOR	
CXA1451M		NJM2234M			NS7-31	TRANSISTON	
:XD1175AM		NJM2235M			S7-31	2SA1162G	7-37
:XD1216M		NJM2245M			NS7-31	2SA1162G	
CXD1217M		NJM2246M			NS 7-31 NS 7-32	2SA952	
CXD2105AQ		NJM360M			NS 7-32	2SC1623	
:XD8031Q		NJM78L05A				2SC2757	
:XD8033Q		NJM78L09A			NS7-32	2SK508	
CXD8054		NJM7905FA			S7-32		
CXD8070K		NJM7909FA			ANS 7-32	2SK94	1-31
CXD8262Q		NJM79L09A	7-25	SN74LS00N		DIODE	
:XD8263Q					7-27	DIODE	
:XD8264Q		PAL16L8BCN		SN74LS08N			7.00
CXD8265Q		PST523C	7-26		7-27	1S2836	
CXD8266Q	7-14				7-27	188119	
CXD8267Q	7-15	SC7S00F			N7-27	1SS226	/-38
├─:XD8276Q	7-15	SI-3522V			7-32		
:XK1203Q	7-10	SM5828P	7-26		7-32	FC54M	7-38
CXK1206AM	7-16	SN74ALS00AN			7-28		
CXK54256P-35	7-16	SN74ALS04BN	7-27		7-28	LD-701MG	
XK5464AP-35	7-17	SN74ALS08N	7-2		N7-33	LD-010MW	7-38
CXK5814P-35		SN74ALS10AN	7- 27	SN74LS20N	7-33		
UXK58257AM-1	2LL7-17	SN74ALS11AN	7-27	SN74LS21N	7-28	MA152WK	7-38
CXK58258AP-25	5 7-16	SN74ALS138N	7-27	SN74LS221N	S 7-33		
CXK5863P-25		SN74ALS139N9	S 7-27	SN74LS244N	7-29	RD??ESB?	
CXK5864BSP-76		SN74ALS151N	7-27	SN74LS245N	7-33	RD??M-B?	
CXQ70108P-8		SN74ALS153N	7-28	SN74LS247N	S 7-33	RD??MB	7-38
CXQ70116P-10		SN74ALS157AN	1 7- 2 8	SN74LS283N	S7-34		
CXQ71051P		SN74ALS161BN	l7-28	SN74LS32N	7-2	TLR214	
1 CXQ71054P		SN74ALS174N		SN74LS373N	7-34	TLY123	7- 38
		SN74ALS175N		SN74LS374N	7-29		
HD14053BFP	7-22	SN74ALS21AN			7-34		
		SN74ALS244BN			7-34		
IB-38	7-22	SN74ALS244BN			7-29		
,		+ · · · · · · · · · · · · · · · · · · ·					

等価回路はICメーカーのData Bookに従いました。

The circuit diagram of each IC is obtained from the IC data book published by the manufacturer.

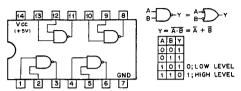


IC

74F00PC (NS) SN74ALS00AN (TI) SN74LS00N (TI)

TTL 2-INPUT POSITIVE-NAND GATE

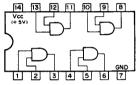
- TOP VIEW -

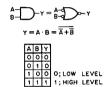


74F08PC (NS) SN74ALS08N (TI) SN74LS08N (TI)

TTL 2-INPUT POSITIVE-AND GATE - TOP VIEW -

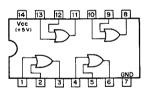


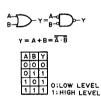




74F32PC (NS) SN74ALS32N (Ti) SN74LS32N (TI)

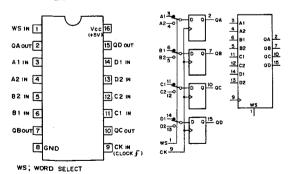
TTL 2-INPUT POSITIVE-OR GATE - TOP VIEW -





74F399PC (NS)

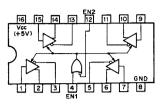
TTL QUAD 2-INPUT MULTIPLEXERS WITH STORAGE - TOP VIEW -



INPUTS			OUTPUTS			
ws	СК	QA	QB	оc	QD	
0	-5	A1	91	C1	D1	
1	5	A2	B2	C2	02	
X	0	QAO	QBO	QÇO	ODO	

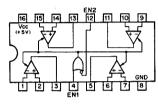
1; HIGH LEVEL O; LOW LEVEL X; DON T CARE

AM26LS31PC (ADVANCED MICRO DEVICES) HIGH SPEED DIFFERENTIAL LINE DRIVER - TOP VIEW -



FUNC	FUNCTION TABLE				
EN2	EN1	OUTPUT			
0	0	ENABLE			
0	1	ENABLE			
1	0	HI-Z			
1	1_	ENABLE	i		
1;Н	O; LOW LEVEL 1; HIGH LEVEL HI-Z; HIGH IMPEDANCE				

AM26LS32PC (ADVANCED MICRO DEVICES) HIGH SPEED DIFFERENTIAL LINE RECEIVER - TOP VIEW -



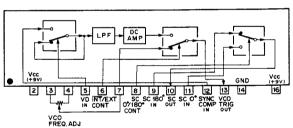
	FUNCTION TABLE				
i			OUTPUT		
	٥	0	ENABLE		
-	0	1	ENABLE		
	1	0	HI-Z		
	1	1	ENABLE		
	O; LOW LEVEL 1; HIGH LEVEL HI-Z; HIGH IMPEDANCE				

	SENSE	INPUT VOLT
LS32	±200mV	± 7V
LS33	±500mV	±15V

BX1291 (SONY)

APC AMPLIFIER AND SC 0/180° SELECTOR

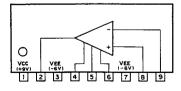
- REAR VIEW -



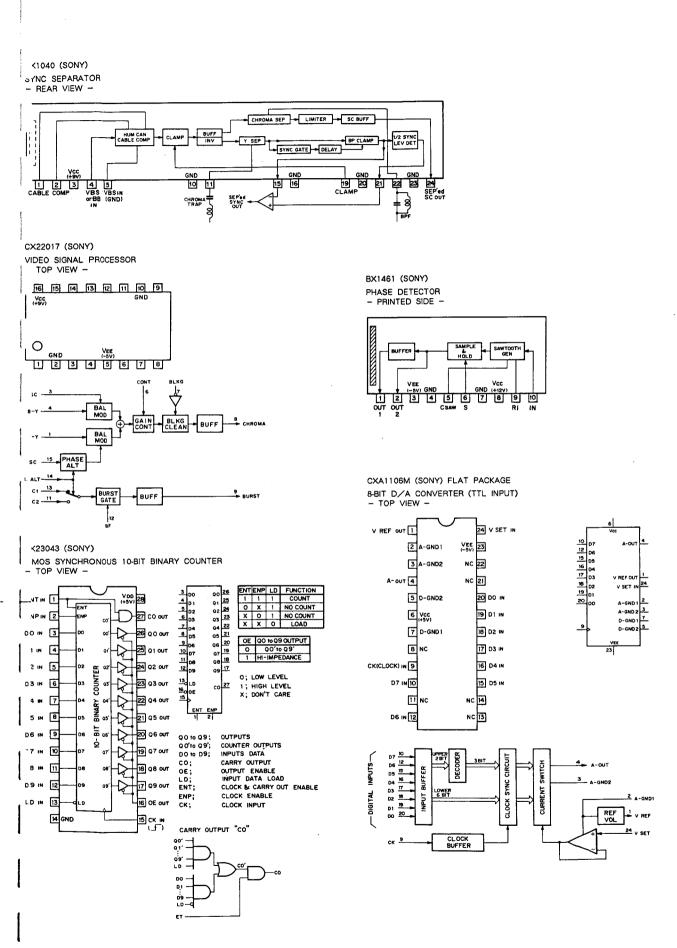
BX1356 (SONY)

VIDEO OUTPUT AMPLIFIER

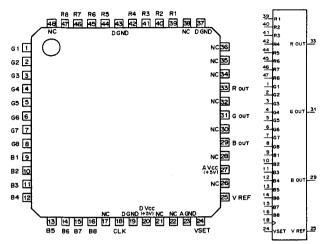
- PRINTED SIDE -



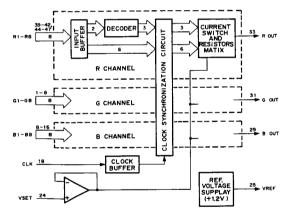




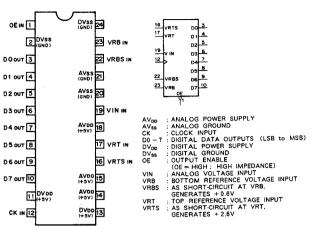
CXA1260Q-Z (SONY) FLAT PACKAGE 8-BIT 35MHz 3-CHANNEL D/A CONVERTER - TOP VIEW -



B1-B8 ; B CHANNEL DIGITAL INPUTS (LSB TO MSB)
B OUT ; B CHANNEL ANALOG OUTPUT
CLK ; D/A CONVERSION CLOCK
G1-G8 ; G CHANNEL DIGITAL INPUTS (LSB TO MSB)
G OUT ; G CHANNEL ANALOG OUTPUT
R1-R8 ; R CHANNEL DIGITAL INPUTS (LSB TO MSB)
R OUT ; R CHANNEL DIGITAL INPUTS (LSB TO MSB)
VREF ; REFERENCE VOLTAGE OUTPUT, +1.2V TYP.
VSET ; BIAS INPUT (VSET = +0.87V ; D/A OUT = 1Vp-p)

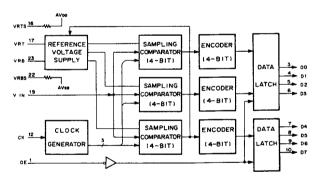


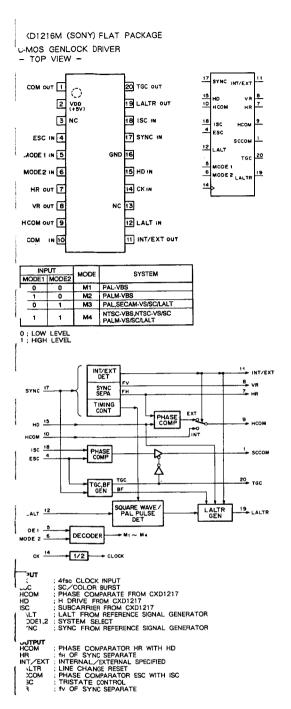
CXD1175AM (SONY) FLAT PACKAGE C-MOS 8-BIT 20MSPS VIDEO A/D CONVERTER - TOP VIEW -



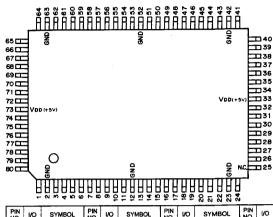
07750	INPUT SIGNAL	I		D.	ATA O	UTPU	TS		
STEP	VOLTAGE	D7	D6	D5	D4	D3	D2	D1	D0
0	OV (VRT)	1	1	1	1	1	1	1	1
1	0.01V	1	1	1	1	1	1	1	0
-		1	-:	1		:	:	1	;
	:	1 :	- 1	:	:	:	:	1]_:
127	1.34V	1	0	0	0	0	0	0	0
128	1.35V	0	1	1	1	1	1	1	1
:	:	:			1	1	- :	-	Γ:
: [: :		1	1	1 :	1 :	÷	:	<u> </u>
255	255 2.7V (VRB)		0	0	0	0	0	0	0

0 : LOW LEVEL 1 : HIGH LEVEL





CXD8031Q (SONY) FLAT PACKAGE C-MOS GATE ARRAY - TOP VIEW -

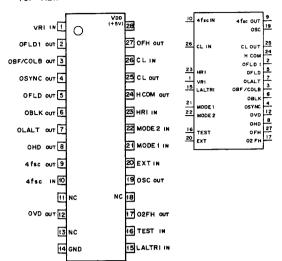


PIN NO.	1/0	SYMBOL	PIN NO.	1/0	SYMBOL	PIN NO.	W	SYMBOL	PIN NO.	1/0	SYMBOL
1	0	02	21	0	Q11	41	0	Q18	61		Œ
2	-	GND	22	0	Q12	42	-	GND	62		CLK
3	O	C33	23	-	GND	43	0	Q19	63	-	GND
4	0	Q4	24	1	CLR	44	0	Q20	64	0	E2
5	1	D4	25	-	N.C.	45		D20	65	0	E3
6	1	D5	26	0	Q13	46	1	D21	66	0	E4
7		D6	27	0	Q14	47		D22	67		C4
8	1	D7	28	0	Q15	48		D23	68		C5
9	0	Q5	29	1	D13	49	0	Q21	69		CE
10	0	Q6	30	1	D14	50	0	Q22	70	_	A0
11	0	Q7	31	1	D15	51	0	Q23	71		A1
12	-	GND	32	1	DS1	52	-	GND	72		WE
13	0	Q8	33	-	Voc (+5V)	53	T	MODE	73		Vap (+5V)
14	0	Q9	34	1	DS2	54		TEST	74	-	DS0
15	1	D8	35		D16	55		C0	75	1	D0
16	1	D9	36	1	D17	56	0	EO	76	1	D1
17	1	D10	37	1	D18	57	1	C1	77	1	D2
18	1	D11	38	ī	D19	58	1	C3	78	1	D3
19		D12	39	0	Q16	59	0	E1	79	0	Q0
20	0	Q10	40	Ó	Q17	60		СЗ	80	0	Q1

A0, 1 CO - C5 CE CLK CLR D0 - D23 DS0 - DS2 E0 - E4 MODE OE Q0 - Q23 TEST WE

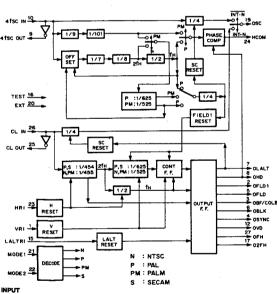
ADDRESS
COMMAND
COMMAND ENABLE
CLOCK
CLEAR
DATA INPUT
DATA STROBE
EXPONENT OUTPUT
OUTPUT MOBE
OUTPUT ENABLE
DATA OUTPUT
TEST PIN
WRITE ENABLE

CXD1217M (SONY) FLAT PACKAGE C-MOS SYNC GENERATOR TOP VIEW -



SYSTEM	4fsc	CLOCK
NTSC	910fн	910fн
PAL	1135f++2fv	908fH
PALM	909fu	910fH
SECAM	_	908fH

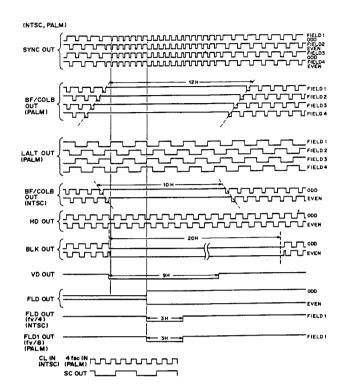
INP		SYSTEM
MODE1	MODE2	3101EM
0	0	NTSC
0	1	SECAM
1	0	PALM
1	1	PAL
0 ; LOW 1 ; HIGH	LEVEL.	

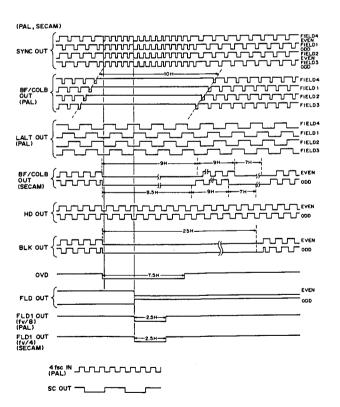


INPUT 4fSC IN CL IN EXT 4fsc input CLOCK input Sync mode select (L: internal/h; external) H reset Line Change reset System select V reset

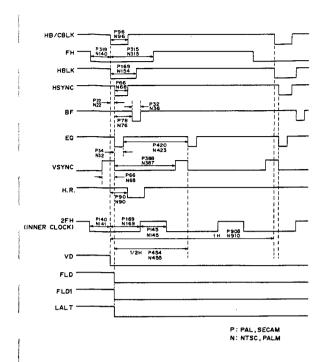
HRI LALTRI MODE 1,2 VRI

OUT PUT
4/5C OUT
CL OUT
HCOM
OBF/COLB
OBLK
OFH
OFLD
OFLD
OHD
OLALT
OSC
OSYNC
OVD : 44SC OUTPUT
: CLOCK OUTPUT
: PHASE COMPARATOR
: 2H OUTPUT
: BURST FLAG/COLOR BLANKING
: COMPOSTE BLANKING
: H FREQUENCE
: EVEN. ODD
: FIELD
: H DRIVE
: LINE CHANGE
: SUBCARRIER
: COMPOSITE SYNC
: V DRIVE

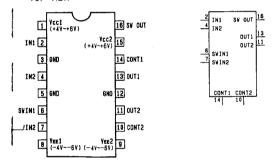






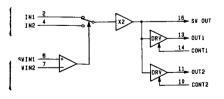


XA1451M (SONY)
WIDEBAND VIDEO SWITCH
- TOP VIEW -

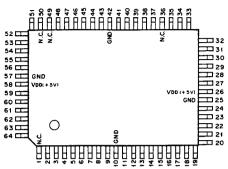


NPUT
ONTI, 2 : POWER SAVE CONTROL PIN OF DRV.1 AND DRV.2
4T1, 2 : 1/2-CHANNEL INPUT PIN
WIN1, 2 : IN1/IN2 PINS SWITCH CONTROL PIN

OUTPUT PIN OF DRV.1/2
OUT). 2 : OUTPUT PIN OF DRV.1/2
OUTPUTS INI PIN OR IN2 PIN WHICH HAS BEEN SELECTED BY SWITCH.



CXD8033Q (SONY) FLAT PACKAGE C-MOS GATE ARRAY - TOP VIEW -



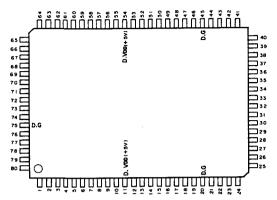
PIN NO.	VΟ	SYMBOL.	PIN NO.	1/0	SYMBOL	PIN NO.	1/0	SYMBOL
1	- 1	N.C.	23	\neg	A03	45	0	Y09
2	0	X05	24		XCK	46	0	Y08
3	0	X04	25	-	- GND		0	Y07
4	0	X03	26	-	VDO(+5V)	48	0	Y06
5	0	X02	27	T	LDS			N.C.
6	0	X01	28	1	UDS	50	-	N.C.
7	0	X00	29	1	WE0	51	0	Y05
8	-	D00	30	1	WE1	52	0	Y04
9	-	D01	31	0	AR0	53	0	Y03
10	-	GND	32	0	AR1	54	0	Y02
11	1	D02	33	0	LNO	55	0	Y01
12	1	D03	34	0	LN1	56	0	Y00
13	1	D04	35	0	WKEY	57	-	GND
14	1	D05	36	_	N.C.	58	-	Vpp(+5V)
15	1	D06	37	1	XLD	59	0	X11
16	1	D07	38	1	YLD	60	0	X10
17	1	D08	39	1	YMD	61	0	X09
18	1	D09	40	1	YCK	62	0	X08
19		D10	41	1	TEST	63	0	X07
20	1	D11	42	_	GND	64	0	X06
21	1	A01	43	0	Y11			
22	1	A02	44	0	Y10			

21	A01	ARO	31
22	A02	ARI	32
23	A03	~~!	
	AU3	xoo	7
		X01	6
В	000	X02	_5
9	DO1	X03	. 1
11	D02	X04	_3
12	003	X04 X05	2
13	004	X05	64
14	DO5	X06 X07	63
15	D06	XOF	62
16	007	X09	61
17	DO8	XIO	60
18	DO9	XII	59
19	010	^''	
20	D11	LNO	33
	511	LNO	34
29		LNT	
30	WEO WE1	WKEY	35
_	WEI	WKET	_
27			
28	LDS		i
41	UDS		
	TEST		
24			56
	XCK	Y00	55
37		Y01 Y02	54
_	XLD	Y03	53
40		103 Y04	52
38	YCK		51
39	YLD	Y05	48
-	YMD	Y06	47
	ļ	Y07	46
	1	Y08	45
	I	Y09	44
	1	Y10	43
	1	Y1 1	 "
	1		l

CXD2105AQ (SONY) FLAT PACKAGE

C-MOS DIGITAL COMB FILTER FOR VTR'S

- TOP VIEW -



PIN No.	1/0	SIGNAL	PiN No.	1/0	SIGNAL	PIN No.	1/0	SIGNAL	PIN No.	1/0	SIGNAL
1	1	BPV	21	1	IGD0	41	_	IGW2	6		IGY1
2	0	OPER	22	_	IGC1	42	_	IGW3	62		IGY2
3	- 1	A.VDD P	23	-	IGIH	43	Τ.	IGW4	63		IGH1
4		IGPE	24	_	IGRP	44	1	IGW5	64	0	ORZH
5	1	IGPC	25	1	IGOC	45	-	D.G	65	0	OR00
6	-	A.G P	26	- 1	A.VDD C	46	1/0	BMY1	66		IGRC
7	1	IGZV	27	0	OCIO	47	1/0	BMY2	67	1	IYC8
8	0	OZVD	28	0	OCVG	48	1/0	BMY3	68		IYC7
9	0	OZPS	29	-	ICVR	49	1/0	BMY4	69	1	IYC6
10		IGZP	30	0	OCIR	50	1/0	ВМУ5	70	1	IYC5
11	-	D.Voo	31	-	A.G C	51	1/0	BMY6	71	1	IYC4
12	1/0	BMC1	32	0	OCVB	52	1/0	BMY7	72	- 1	IYC3
13	1/0	BMC2	33	0	OYVB	53	1/0	BMY8	73	1	IYC2
14	1/0	BMC3	34	T -	A.G Y	54	Γ-	D.VDD	74	1	IYC1
15	1/0	BMC4	35	0	OYIR	55		IGAC	75	-	D.G
16	1/0	BMC5	36	-	IYVR	56	T.	IGL3	76	0	OADC
17	1/0	BMC6	37	0	OYVG	57	l I	IGL2	77		IGNP
18	1/0	BMC7	38	0	OYIO	58	1	IGL1	78	1	IGBE
19	1/0	вмс8	39	-	A.VDD Y	59	1/0	BASO	79	1	IGPF
20	-	D.G	40	1	IGW1	60		IGC2	80	L	IGCK

		\$	4	취속	6W5		8	6	8	•	·		
ſ		I M	GW2		6W4		161	161.2	161.3		16.PR	OROO	65
74	ICYI	9	9	5	<u> </u>		-	-	9		=	BMY 1	46
73	ICYZ											BMY2	47
72	ICY3											BMY3	48
71	ICY4											BMY4	49
70	ICY5											BMY5	50
69	ICY6											BMY6	51
<u>68</u>	ICY7											BMY7	32
67	I CY8											BMY8	23
74 73 72 71 70 69 67 22 29												0110	47 48 49 50 51 53 38 37 37 35
-60	1601												33
~	IGC2											OYVB	37
29	I CVR											OYVG OYIR	35
												UTIN	
61 62 36	IGY1											BMC1	12
62	IGY2											BMC2	13
36	IYVR											BMC3	14
												BMC4	15
	ı											BMC5	16
												BMC6	12 13 14 15 16 17 18 19 27 28 30
	IGZV											BMC7	18
-	OZVD											BMC8	۳,
10	IGZP											0010	27
-	OZPS												32
80]											OCVB	28
-5	IGCK											oc ve	30
7 8 10 9 80 5 76	IGPC OPER											OCIR	
76	UPER											ORZH	<u>64</u> 59
	DADO BPV	•										BASO	59
	""		8	x	a o	ų	Ŧ	ĕ	ğ	ä	£ 9	5-50	
	Ц_	_	프	<u> </u>	25 168	3	<u> </u>	5	9	<u> </u>	2		j
			~	2 2	1 2	S		3 ;	1 8	:	"		

```
INPUT

BPY

EXT / INT CLOCK SELECT

ICVR

ESTABLISHES MAXIMUM AMPLITUDE VALUE FOR OCIO

(PIN 27)

IGAC

CORRELATION CIRCUIT ON / OFF

IGCS

CORRELATION CIRCUIT SELECT

(V/C SEPARATION MODE)

IGCC

CHROMA FLAT SECTION HORIZONTAL FILTER SELECT

(V/C SEPARATION MODE)

IGCC

EXTERNAL

IGCC

EXTERNAL

IGCC

EXTERNAL

IGCC

IGCC

EXTERNAL

IGCC

IGCC

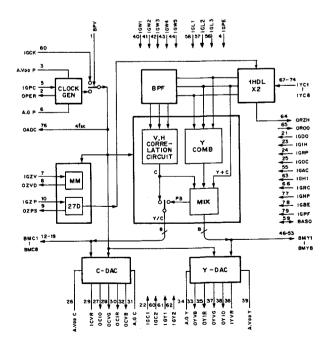
EXTERNAL

IGCC

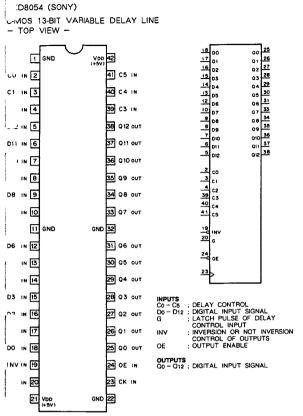
IG
```

OTHER
AG C : ANALOG GND FOR CHROMA D/A
AG P : ANALOG GND FOR YOD
AVDD C : ANALOG GND FOR Y D/A
AVDD P : ANALOG GND FOR SUPPLY FOR CHROMA D/A
AVDD P : ANALOG POWER SUPPLY FOR Y D/A
AVDD P : ANALOG POWER SUPPLY FOR Y D/A
DG : DIGITAL GND
D.VDD : POWER SUPPLY FOR DIGITAL

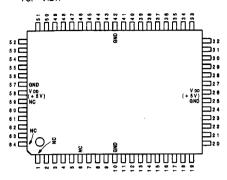
INPUT/OUTPUT
BASO : EDGE DETECTION LEVEL SELECT (Y/C SEPARATION MODE)
BMC1 - BMC8: CHROMA DIGITAL SIGNAL
BMY1 - BMY8: Y DIGITAL SIGNAL





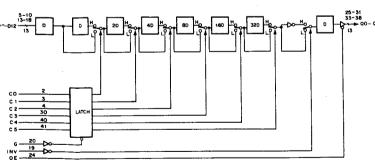


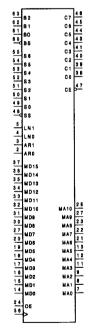
CXD82	64Q (SONY)			
	CONTROLLED	то	ADDRESS	ARITHMETIC
- TOP	VIFW -			



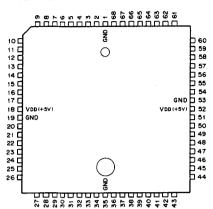
											(V DD = +
PIN No.	1/0	SIGNAL	PIN No.	1/0	SIGNAL	PIN No.	1/0	SIGANL	PIN No.	170	SIGNAL
1	-	NC	17	i i	MDS	3 3	1	MD11	4 9	1	80
2	ī	ARO	1.8	1	MD4	34	1	MD12	5.0	_	S 1
3	1	AR1	19	1	MD5	3.5	1	MD13	5 1	1	8 2
4	1	LNO	20	1	MD6	3 6	1	MD14	5 2		8.3
5	1	LN1	21	0	MAS	37	1	MD15	5.3	1	8 4
8	-	NC	22	0	MA7	38	0	CO	5.4	1	8.6
7	0	MAG	23	0	MAS	39	0	C1	5.5	1	8.6
	0	MA1	24	1	0E	40	0	C2	5.6	1	CK
	0	MA2	2.5	- 1	GND	41	0	CS	5 7		GND
1 0	-	GND	26	- 1	Voo	42	-	GND	5.8	-	Y 00
11	0	MAS	27	0	MAS	43	0	C4	5 9	-	NC
1 2	0	MA4	28	0	MA10	44	0	C 5	6.0	_	B 8
13	0	MAS	28	1	MD7	4.5	0	CB	6 1		B 0
1 4	1	MDO	3.0	ı	MDS	46	0	C 7	6.2	1	B 1
1 5	1	MD1	31	1	MD9	47	0	CE	6.3		B 2
1 6	1	MD2	3 2		MD10	4.8		\$8	6.4	-	NC

C5	C4	C3	C2	C1	CO	DELAY (CLOCK)
0	0	0	0	0	0	2
0	0	0	0	0	1	3
0	0	0	0	1	0	4
0	0	0	0	1	1	5
:	:	: -		1	:	
1	1	1	1	0	0	62
1	1	1	1	0	1	63
1	1	1	1	1	0	64
1	1	. 1	1	1	1	65

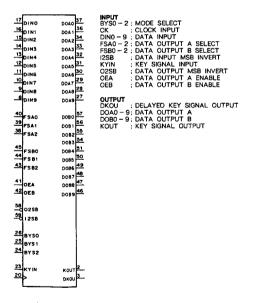


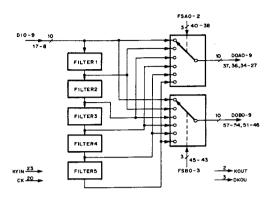


CO-C7 ; CONTROL PORT FOR ADDRESS CE ; CHIP ENABLE MAC-MAIO ; MEMORY ADDRESS PORT CXD8070K (SONY)
C-MOS DIGITAL VIDEO LPF
- TOP VIEW -

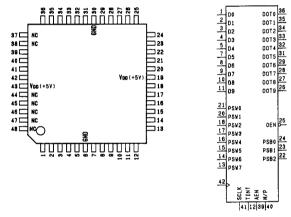


PIN No.	1/0	SIGNAL									
1	- 1	GND	18	-	VDD	35		GND	52	-	Voo
2	0	KOUT	19	-	GND	36	0	DOA1	53		GND
3	0	DKOU	20	1	CK	37	0	DOA0	54	0	DOB3
4	-	NC	21	-	NC	38	1	FSA2	55	0	DOB2
5	-	NC	22	-	NC	39		FSA1	56	0	DOB1
6	-	NC	23	1	KYIN	40	1	FSA0	57	0	DOB0
7	-	NC	24	T	BYS2	41	1	OEA	58	1	O2SB
8	. 1	DIN9	25	-	BYS1	42		OEB	59	- 1	12SB
9	1	DIN8	26		BYS0	43	1	FSB2	60	-	NC
10	1	DIN7	27	0	DOA9	44		FSB1	61	-	NC
11	1	DIN6	28	0	DOA8	45		FSB0	62	-	NC
12	1	DIN5	29	0	DOA7	46	0	DOB9	63	-	Ŋ
13	T	DIN4	30	0	DOA6	47	0	DOB8	64	-	NC
14		DIN3	31	0	DOA5	48	0	DOB7	65	-	NC OX
15	1	DIN2	32	0	DOA4	49	0	DOB6	66	-	NC
16	1	DIN1	33	0	DOA3	50	0	DOB5	67	-	NC
17	1	DINO	34	0	DOA2	51	0	DOB4	68	-	NC



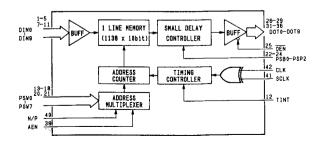


CXK1203Q (SONY)
C-MOS DIGITAL LINE MEMORY
- TOP VIEW -

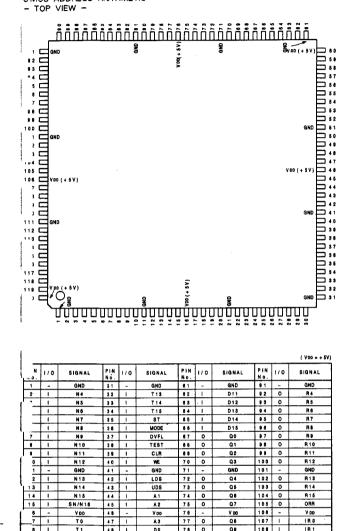


										(VDD = + 5V
PIN No.	1/0	SIGNAL	PIN No.	1/0	SIGANL	PIN No.	1/0	SIGNAL	PIN No.	∨ 0	SIGNAL
1	1	D0	13	П	PSW7	25	1	OEN	37	_	N.C
2	1	D1	14	1	PSW6	26	0	DOT9	38	_	N.C
3	1	D2	15	1	PSW5	27	0	DOT8	39	1	AEN
4	1	D3	16	1	PSW4	28	0	DOT7	40	_	N/P
5	1	D4	17	1	PSW3	29	0	DOT6	41	_	SCLK
6	-	GND	18	T	PSW2	30	_	GND	42	1	ÇLK
7	1	D5	19	- 1	VDD	31	0	DOT5	43	-	VDD
8	ī	D6	20		PSW1	32	0	DOT4	44	-	N.C
9	ı	D7	21	1	PSW0	33	0	DOT3	45	-	N.C
10	1	D8	22	1	PSB2	34	0	DOT2	46	-	N.C
11	1	D9	23		PSB1	35	0	DOT1	47	-	N.C
12	1	TINT	24	1	PSB0	36	0	DOTO	48	-	N.C

AEH LINE MENORY SELECT
CLUX
DIMO-DINS (TUBED DATA IMPUT
DOTO-DOTS (TUBED DATA OUTPUT
N/P
N/P
SISC/PAL/SECAM SELECT
OCH
PSBO-PSB2 (DELAY STEP SELECT(8 BITXM)
FOLLOX
SCLK
TINT (TEST



(D8262Q (SONY) - MOS ADDRESS ARITHMETIC - TOP VIEW -



_											
N o .	1/0	SIGNAL	PIN No.	170	SIGNAL	PIN No.	1/0	SIGNAL	PIN No.	1/0	SIGNAL
1	-	GND	3 1	-	GND	81		GND	9 1	-	GND
2	1	N 4	3 2	-	T13	8 2	_	D11	₩ 2	0	R4
•	1	N 5	3 3	1	T14	8.8	. F	D12	9 3	0	R 5
	1	N 6	34	1	T15	84	1	D13	9.4	0	R6
_	1	N7	3.5	1	ST	8.5	_	D14	0.5	0	R7
	1	N8	3.6	- 1	MODE	8.6	1	D15	9.6	0	R8
7	1	N9	37	1	OVFL	6.7	0	00	9.7	0	R9
8	ı	N10	3.8	1	TEST	8 6	0	Q1	9.8	٥	R10
	-	N11	3 9	ī	CLR	6 9	0	Qź	9.9	0	R11
0	ı	N12	40	ı	WE	70	0	Q3	100	0	R12
1	-	GND	41	-	GND	71	-	GND	101	-	GND
2	1	N13	4 2	1	LD\$	7 2	0	Q4	102	0	R13
1 3	1	N14	43	1	UDS	7.3	٥	Q.6	103	0	R14
1.4	1	N15	44		A1	7.4	0	Q8	104	0	R15
15	1	SN/N15	4.5	1	A 2	7.5	٥	Q7	105	0	ORR
8	-	VDD	4.8	-	V DD	7 6	-	V DD	106	-	V DD
7	ī	TO	4.7	T	A3	77	٥	QB	107		180
8	1	T 1	48	1	DO	7.8	0	Qg	108		IR 1
	1	T2	4.9	1	D1	7.8	0	Q10	108	1	8.0
20	1	T3	5.0	1	D2	80	0	Q11	110	1	81
21		GND	5 1	-	GND	B 1	-	GND	111	-	GND
2	1	T4	5 2	ī	D3	82	0	Q12	112	1	CK
3	1	T 5	5.3	1	D4	8.3	0	Q13	113	1	\$ 2
4	ı	T 6	5.4	1	D 5	84	0	014	114		8.3
5	1	T 7	5.5	1	D6	8.5	0	Q15	115	T	SM
2 6	+	TS	5.6	1	07	8.6	0	ORQ	116	1	NO
27	1	T 9	57	1	D8	87	0	RO	117	1	N1
28	,	T10	5.8	1	D9	8.8	0	R1	118	1	N2
9	1	T11	5.9	ī	D10	8.9	0	R2	119	1	N3
ō	i	T12	8.0	-	V pp	9.0	0	RS	120	-	V pp

1 1 6	N O	Qo	6 7
117	N1	Q1	6.8
118	N2	92	6.9
119	N3	03	70
2	N4	Q4	72
3	Nō	Q5	78
4	N B	Qe	7.4
-	N7	97	7.6
	N O	QB	77
7	N B	Q9	7 9
-	N10	Q18	
10	N11	Q11	8 2
12	N12	Q12	
13	N13	Q13	84
14	N14	Q14	8 6
_	N15	Q15	
17	T O	RO	88
1 9	T 1	R 1	8 0
2 0	T 2	R2	90
2 2	T3	R 3	9.2
23	T 4	84	9.3
24	T 6	R5	9.4
2 5	T 6	R6	9.5
2 6	T 7	R7	96
27	T B	RS	9 7
2 8	T D	R9 R10	9.8
2 9	T10	R11	
3 0	T12	R12	100
9 2	T13	R13	102
3 3	T14	R14	103
3.4	T15	R15	104
48			8 8
41	DO	ORQ	105
50	D1	ORR	
5 2	D2	WE	40
5 3	D3	UDS	3
5 4	D 8	LDS	32
5 5	D 6		109
5 6	D7	80	110
5 7	D8	\$1	113
5.8	D S	8 2	114
5.9	D10	8.3	115
8 2	D11	SM	1 6
63	D12	SN/N16	3 5
8 4	D13	81	
6.5	D14	IRD	107
8.8	D15	IR 1	3 6
44	A 1	MODE	37
4 5	A 2	OVFL	۳
47	A 3		3 8
112	L	TEST	3 9
_	_	CLR	1
			-

(VDD = + 5V)

1 NPUT ; INTERNAL REGISTER ADDRESS AT-AS : INTERNAL REGISTER CLEAR

CK : CLOCK

CLR : INTERNAL REGISTER CLEAR

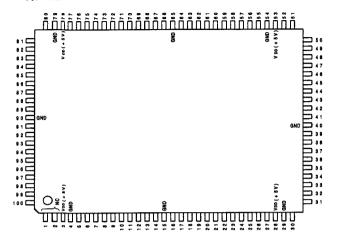
DO-D15 : INTERNAL REGISTER DATA

IRS : CORQ-ORR OUTPUT CONTROL AT PACE-PECTIVE MODE

IR1 : CORQ-ORR OUTPUT CONTROL AT TURN OVER PAGE MODE IN1 : ORG. ORG OUTUT CONTROL AT TURN OVER PAGE MODE
LDS : LOWER DATA STROBE
MODE : MODE SELECT
(0:PACE-PECTIVE MODE, 1:TURN OVER PAGE MODE)
NO-N15 : N DATA PORT
OVERFLOW
S0-S3 : SHIFT HUMBRICAL PORT
SM : SHIFT MODE SELECT
(0:RIGHT SHIFT MODE, 1:LEFT SHIFT MODE)
SNIN15 : PACE-PECTIVE MODE: N DATA CODE
TURN OVER PAGE MODE: N DATA CODE
TURN OVER PAGE MODE: DON'T CARE
T0-T15 : T DATA PORT
TEST : TERST TERMINAL
UDS : UPPER DATA STROBE
WE : WAITE ENABLE ; WRITE ENABLE OUTPUT ORQ ; Q DATA CLIPPING SIGNAL
ORR ; R DATA CLIPPING SIGNAL
Q0-Q15 ; Q DATA PORT
R0-R15 ; R DATA PORT



CXD8263Q (SONY)
C-MOS VARIABLE LOW PASS FILTER
- TOP VIEW -

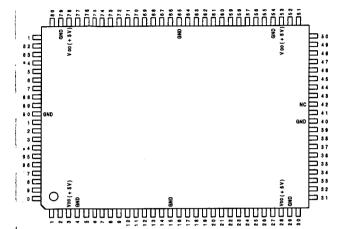


PIN No.	110	SIGNAL	PIN No.	1/0	SIGNAL	PIN No.	1/0	SIGNAL	PiN No.	1/0	SIGNAL
1	-	NC	2.6	1	1 E 0	51	1	104	7.6	0	082
2	- 1	NC	27	1	* (E1	5 2	ı	105	7.7	0	083
3	- 1	VDD	2.8	-	VDD	5.3	-	V DD	7.0	-	V pp
4	- 1	GND	29	-	GND	5.4	-	GND	79		GND
5	1	IH 4	3.0		1 E 2	5.6	1	ICB	80	0	OB4
8		IH &	31	1	IE3	5.6	ī	107	81	0	OB5
7		IH 8	3 2	1	1E4	5.7	1	180	8.2	0	OBS
		111.7	33		1 E 5	5.8	1	181	8.3	0	087
9	i i	10.0	34	$\overline{}$	1 E 6	5.9	1	182	84	1	SOBO
10		19.1	3.5	1	IE7	60	1	183	8.5		8081
11		16.2	3.6	1	100	61	ı	184	8.6	0	OAG
12		10.3	3 7	ī	101	6.2	ī	185	87	0	OA1
13		IG 4	3.8	1	102	6.3	- 1	186	8.8	0	OAZ
1.4	1	19.5	3 9	1	103	64	1	187	8.9	0	OAS
1.5		GND	40	-	GND	6.5	-	GND	90	-	GND
1.6	1	19.6	4.1	17	CK	8.6	1	IAO	91	0	OA4
17		1G 7	42	1	MODE	67	1	IA1	9 2	0	OA5
18	1	1F0	43		ID4	6.0	1	1 A 2	9 3	0	OA6
19	5 1	1F 1	44	1	10.5	6.9	1	IA 3	9.4	0	OA7
20		IF2	4.5	i	106	7.0	1	14.4	9 5	1	SOAU
21		IF3	4.6	1	107	71		1 A 5	9.6	T	SOA1
2 2		IF4	47	1	100	72	ī	IAS	9.7	1	1110
2 3		IF5	48	1	101	73	1	1A7	9.8	T	IH1
2.4	1	IF6	4.9	1	102	74	0	OBO	9.9	1	I H 2
2.5		IF?	50	1	IC3	7.5	0	081	100	1	IH3

73	9.4	
72 147	0A7 a 9	INPUT
71 148	OA6 92	CK ; CLOCK
70 IA5	OAS 9 1	IAO-IA7 ; A DATA PORT
	DA4 6 9	IBO-IB7 ; B DATA PORT
69 68 1A3 1A2		ICO-IC7 ; C DATA PORT
SHIA2	0A2 8 8	IDO-ID7 ; D DATA PORT
°/ IA1	OA1 I	IEO-IET ; E DATA PORT
6 8 IAO	0A0 8 6	IFO-IF7 ; F DATA PORT
64	8 3	IGO-IG7 ; G DATA PORT
63	087 8 2	IHO-IH7 ; H DATA PORT
421150	086 8 1	MODE : MODE SELECT (0:COMPLEMENT 2 MODE, 1:INTEGER MODE)
61	085	BOAD, SOA1; DAG-QA7 OUTPUT DATA SELECT
401137	084 7 7	SOBO, SOB1; OBO-OB7 OUTPUT DATA SELECT
58 183	UB3 17.6	
5 8 5 8	UB2 17.5	OUTPUT
67 1 9 1	OB1 7.4	OAD-OA7 ; A DATA PORT
1 B 0	OB0 17-3	OBO-OB7 ; B DATA PORT
5 8 1 C 7		
5 5 I C 8		
5 2 I C 5		
55 IC8 52 IC5 51 IC4		
50		
49 1C3		
4 8 C 2		
50 C3 49 C2 48 C1 47 C0	ļ	
	i .	
46 107	80A1 19 8	
451.00	80A0 9 5	
44 43 10 5		
4의104	50B1	
3 9 I D 3	SOB0	
	MODE 42	
37 201	MOUE 41	
36 100	1	
3.5	1.7	
341'6'	167	
23 1'-	19 6 14	
3 2 I E 5	16 8 13	
TIE4	16 4 1 2	
3 1 I E S	163 11	
30 IE2		•
27 IE1	IG 1 0	
20 IEO	160	
2 5	8	
24117	1H 7 7	
23 ' ' "	1H 6 8	
22,11.3	IH 5 6	
	IH 4 100	
211 IF 3	IH 3	

(D8265Q (SONY)

- MOS LINEAR INTERPOLATION ARITHMETIC - TOP VIEW -



PIN			PIN			PIN			PIN	1/0	SIGNAL
D.	1/0	BIGNAL	No.	1/0	SIGNAL	No.	1/0	SIGNAL	No.	170	SIGNAL
	_	WE	2 6	1	T 1	5 1	1	D21	7.6	1	M 20
-	1	LHS	27	1	Ť 2	5 2	1	D22	7.7	1	M 21
, ,	-	Vob	2.8	-	V pp	5.3	-	V 00	7 8	-	VDD
4	-	GND	2 9	-	GND	5.4	-	GND	7 9	-	GND
5	0	Q0	30	0	Q3	5.5	0	Q4	80	0	Q7
3	1	CDB	3 1	1	D00	5.6	1	D28	B 1	1	M30
-	1	CD1	3 2	1	D@1	5 7	1	D24	8 2	1	M81
-	1	CD2	33	ı	D02	5.8	1	D25	6.3	1	XCO
	1	CD3	34	1	D03	5.9	1	D26	8 4	1.	XC1
10	1	CD4	3.5	1	D04	60	1	D27	8.5	1	XC2
11	1	CDS	3.6	1	D05	61	1	D30	8.6	1	XCS
12	1	CD6	37		D06	6 2	T	D31	8.7	1	XC4
3	1	CD7	3.8	1	D07	6.3	1	D32	8.8	1	YCO
4	0	Q1	3.0	ī	D10	0.4	0	Q5	8.0	1	YC1
5	-	GND	4.0	-	GND	6.5	-	GND	9.0	-	GND
1 6	0	Q2	4.1	1	CK	6.6	0	Q8	9 1	0	QB
17	-	CD8	42	-	NC	6.7	1	D33	9.2	_	Y C2
18	1	CD9	4.3	1	D11	8.6	1	D34	93	_	YCS
9	-	CD18	44	1	D12	8.9	1	D35	9.4	ı	YC4
0	1	CD11	4.5	1	D18	7.0	T	D36	9 5	_	XC
1	1	CD12	4.6	1	D14	71	1	D37	9.6	ī	YC
_ 2	ī	CD13	47	1	D15	72	1	MDO	9 7	-	PC
23	-	CD14	48	1	D16	73	ı	M01	98	1	A O
2 4	ı	CD16	4.9	1	D17	7.4	1	M10	9 9	1	A1
7.6	1	T B	5.0	1	020	7.5	1	M11	100	t	A 2

	2 :	<u>: </u> ;	1	: :	1	: :	<u> </u>	š	
	00 M	10,8	10	Ξ	M 20	2	8	100	L
31	DOD	_						QO	5
3 2	D01							Q1	14
3 3	D02							Q2	1 5
3 4								Q3	30
3 5	D08							04	5 5
3 6	D 0 4							-	64
37	D 0 5							Q5	6.6
3 8	D08							Qŧ	80
-	D07							Q7	9 1
3 9	D 10							QB	۳
4 3	011								
44	D12								
4 5									
48	D 13								
47	D14								I
48	D 15								
4 9	D16								I
*	D 17								
50	D20								
5 1									
5 2	D21								
5 6	D 2 2								41
5 7	D 2 3							•	┯-
5 8	D24								2
	D 2 5							LHS	۴
5 9	D26							A O	98
6.0	D27							A1	9 9
6 1	l								10
6 2	D30							A 2	Г
6 3	D31							WE	1
87	D32								
6.8	D 3 3							CDO	7
	D34							CD1	-
6.9	D35							CD2	8
7.0	D36							CD3	9
7.1	D37							CD4	10
9 5								CDS	11
9 6	ХÇ							CDS	12
	YC							CD7	13
9.7	PC								17
	ı							CDS	18
8 3	xco							CDS	19
8.4	XC1							D10	20
8.5	XC2						C	D11	21
8 6	XCS						С	D12	22
8 7							c	D13	
	XC4						c	D14	23
8.8	Y CO						c	D 15	24
8.8	YCI						-		1
9 2	Y C2							то	2 5
9 3	YCS							T 1	26
9.4									27
_	YC4							T 2	$\overline{}$

I NPUT

AO-A2 : REGISTER SELECT ADDRESS
CD0-CD15 : WRITE DATA TO REGISTER

CK : SYSTEM CLOCK
D0-D07 : IMAGE DATA (X:EVEN, Y:EVEN)
D10-D17 : IMAGE DATA (X:EVEN, Y:ODD)
D30-D37 : IMAGE DATA (X:EVEN, Y:ODD)
LHS : REGISTER ASSIGN ADDRESS CHANGE
M00,M01 : CONTROL SIT (X:EVEN, Y:EVEN)
M10,M11 : CONTROL SIT (X:EVEN, Y:EVEN)
M20,M21 : CONTROL SIT (X:EVEN, Y:ODD)
M30,M31 : CONTROL SIT (X:DD, Y:ODD)
M30,M31 : CONTROL SIT (X:DD, Y:ODD)
T0-T2 : OPERATE MOS SELECT
WE : WRITE EMASLE FOR REGISTER
XC0-XC4 : X DIRECTION INTERPOLATION DATA
COUTPUT

OUTPUT

OUTPUT

OUTPUT

OUTPUT

3 YSTERLING TO THE TOTAL

OUTPUT

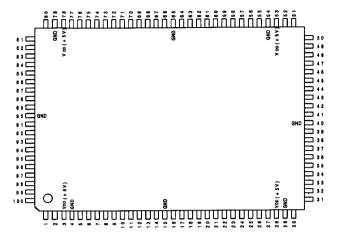
OUTPUT

SYSTEM CLOCK
SYSTEM

CXD8266Q (SONY)

C-MOS MEMORY ADDRESS BUS CONTROL

- TOP VIEW -



											(VDD = + 5V
PIN No.	110	SIGNAL	PIN No.	1/0	SIGNAL	PIN No.	1/0	SIGNAL	PIN No.	1/0	SIGNAL
1	0	MA001	2.6	0	MAGOS	51	0	MADDO	7.6	٥	MA014
2	0	M A 0 0 2	27	0	MA007	52	0	MAD10	77	0	MAD15
3	- 1	Vop	2.8	-	V pp	5 9	-	V DD	78		V 00
4	_	GND	2 9	-	GND	5 4	-	GND	79	-	GND
5	0	MA100	30	0	MA105	5.6	0	MA108	8 0	0	MA113
	0	MASO1	3 1	0	MA106	5.6	0	MA109	B 1	0	MA114
7	0	MA102	3 2	0	MA107	5 7	0	MA110	8 2	0	MA115
8	1	PAGO	33	1	PA12	5.8	1	CADE	8 3	1	WA03
	1	PA01	34		PA13	5 9	1	CAOS	8 4	ı	WA04
10	1	PA02	3.5	ı	PA14	60	ī	CA10	8.5	1	WA05
11	1	PAGS	3.0	ī	PA15	61	1	CA11	8.6	_	WA06
12	11	PA04	37	1	PA16	8 2		ÇA12	8.7		WA07
13	0	MADOS	3.8	1	CAOO	6.3	0	MA011	8.8		WA08
14	0	MAD04	39	1	CA01	64	0	MA012	8 9	1	WAGS
15	-	GND	40	-	GND	6.5	T	GND	9.0		GND
16	0	MA103	41	1	CK	6.6	0	MA111	9 1	- 1	REN8
17	0	MA104	42	1	SEL0	67	0	MA112	9 2	1	SEL1
1.8	-	PA05	4 3	1	WENB	6.8	1	CA13	93	1	WA10
18	-	PAGE	44	1	CAD2	6.9	ı	CA14	9.4	Η.	WA11
20	1	PA07	4.5	1	CAUS	7.0	1	CA15	9.5	l.	WA12
21	1	PAOS	4.6	1	CA04	71	1	CA18	9.6	1	WA13
22	1	PAGS	47	i	CA05	72	I.	WAOO	97	1	WA14
23	1	PA10	48	1	CAUS	73	ı	WA01	9.8	1_	WA15
24	1	PA11	4.0	1	CA07	74	1	WA02	99	1	WA16
25	0	MACO5	5.0	0	MACOS	7.5	0	MA013	100	0_	M A000

	PAGO	M A 000	100
10	PA01	M A 001	2
11	PA02	M A 002	1 3
1 2	PA03	MA003	1 4
1.6	PA04 PA05	MA004 MA005	2 5
1.9	PAGE	MADOS	2 6
20	PA07	MA007	27
2 1	PAGE	MAGGE	50
22	PAGE	MADOD	5 1
23	PA10	M A 010	5 2
	PA11	MA011	6 3
3 4	PA12	MA012	7 5
3 5	PA13	M A 013	7 6
3 6	PA14	MA014	77
3 7	PA16	M A 015	_
	PA16	MA100	5 B
3 8	CADB	MA101	7
44	CA01	MA102	1 8
4 5	CAO2	MA103	17
4.6	CADS	MA104	30
47	CA04	MA105	3 1
4 8	CA05	MA106 MA107	3 2
4 8	CA07	MA107	5 5
5 8	CADB	MA109	5 6
5 9	CAOS	MA110	57
60	CA10	MA111	6.6
6 1	CA11	MA112	87
6 2	CA12	MA113	8 0
6 9	CA13	MA114	8 2
70	CA14	MA115	 •
71	CA15		l
	CA16		l
7 2	WAGG		l
73	WA01		l
8 3	WA02		l
84	WA03		l
8 5	WA04		l
8.6	WA05		l
8 7	WAO6 WAO7		l
8.8	WAO!		
8 8	WAOS		
9 3	WA10	RENB	9 1
9 4	WA11	WENB	4.3
9.5	WA12		١.,
9 6	WA13	SELO	9 2
98	WA14	SEL1	۴
9 9	WA15		4.1
_	WA16	<	

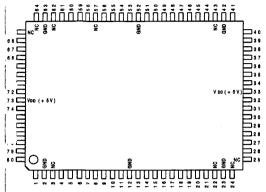
	PAGO	MAGGO	100	I NPUT					
	PA01	M A 001	1	CABO-CA	16 ;	READ ADD	RESS FRO	M MEMORY	
	PA02	MA002	2	CK	;	SYSTEM C	LOCK		
	PA03	MA003	1 3	PA00-PA	16 ;	READ ADD	RESS FRO	M MEMORY	
	PA04	MADO4	14	RENB		LATCH EN	ABLE FO	R READ SYSTE	M
			2 5	SELO		READ/WRI	TE CHAN	GE	
	PA05	MA005	2 6						
٠	PA06	MA006	27				MAG :	MA1	
	PA07	M A 007	50			0 R	EAD W	RITE	
	PAOS	M A 008	5 1			1 W	RITE R	EAD	
	PAOS	M A 009		SEL1		DEAD AND	RESS SE	LECT	
	PA10	M A 010	6 3	9561	,		DE, 1:C/		
1	PA11	M A 011						MEMORY	
	PA12	M A 012	7.7	WA00-WA					
	PA13	M A 013	7 6	WENB	;	LATCH EN	ABLE FO	R WRITE SYST	EM
1	PA14	M A 014							
-	PA16	MA015	_	OUTPUT					
	PA16	MA100	5	M A 100-M M A 100-M			ITE ADDR ITE ADDR		
1	CADB	MA101	-						
-	CA01	MA102	<u>'</u>						
	CA02	MA103	10	CONT	rol	OUT	PUT		
	CADS	MA104	17	SELO	SEL1	MAO	MA1		
4	CA04	MA105	3 0	0	0	PA OUT	WA OUT]	
	CADS	MA106	3 1	0	1	CA OUT	WA OUT	1	
-	CA08	MA107	3 2	1	0	WA OUT	PA OUT	1	
	CA07	MA108	5 5	1	1	WA OUT	CA OUT	1	
4	CADB	MA109	5.6					•	
	CADS	MA110	5 7						
	CA10	MA111	6.6						
_	CA11	MA112	8 7						
	CA12	MA113	8.0						
	0110		8 1						



:D8267Q (SONY)

...MOS MEMORY DATA BUS CONTROL

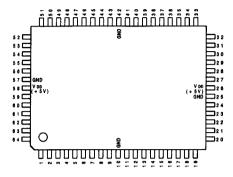
- TOP VIEW --



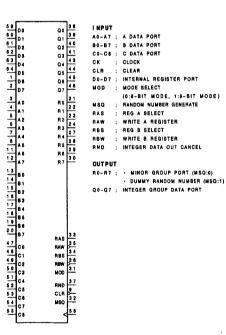
											(V DD = +51
PIN No.	1/0	SIGNAL	PIN No.	1/0	SIGNAL	PIN No.	1/0	SIGANL	PIN No.	1/0	SIGNAL
_	0	8D00	2 1	0	SD06	41	0	SD10	61	0	SD16
	-	GND	2 2	-	NC	42	-	GND	6 2	-	NC
-	-	NC	2 3	-	GND	43	-	NC	63	-	GND
4	0	8D01	2 4	-	NC	44	0	SD11	64	-	NC
5	1/0	RD20	2.5	-	NC	45	1/0	RD30	8.5	-	NC
6	1/0	RD21	2.6	0	SD07	4.6	1/0	RD31	6.6	0	SD17
	1/0	RD22	27	1/0	SD25	47	1/0	RD32	67	1/0	RD35
_	1/0	RD03	28	1/0	SD28	4.6	1/0	RD13	6.6	1/0	RD36
	1/0	RD04	29	1/0	SD27	49	1/0	RD14	6.0	1/0	RD37
. 0	0	SD02	3.0	-	WD0	50	0	SD12	70	1	WD4
11	0	SDOS	3 1	1	WD1	5 1	0	8D13	71	1	WD5
1 2	-	GND	3 2	1	WD2	5 2	-	GND	72	1	WD6
. 3	0	8D04	3 3	-	V 00	5 3	0	SD14	73	-	V DD
4	0	8005	34		WD3	5 4	0	SD15	74	T	WD7
5	1/0	RD23	3.5		RCK	5 5	1/0	RD33	7.5	1	WCK
5	1/0	RD24	36	1	RENB	5 6	1/0	RD34	76	1	WENB
17	1	MODE	37	1	SELO	57	-	NC	77	1	SEL1
18	1/0	RD05	3.8	1/0	RD10	58	1/0	RD15	78	1/0	RD00
19	1/0	RD06	39	1/0	RD11	5 9	1/0	RD16	78	1/0	RD01
0	1/0	RD07	40	1/0	AD12	80	1/0	RD17	80	1/0	RD02

7 8 7 9 8 0 1 9 2 0 0 5 8	RD00 RD01 RD02 RD03 RD04 RD05 RD07 RD10 -RD11 RD12 RD13 RD14 RD15	\$D00 1 0 0 0 0 0 0 0 0	INPUT MODE : DATA BUS CONTROLLER/SELECTOR CHANGE
5 0	RD18	SD16 61	WD8-WD7 ; MEMORY WRITE DATA
1	RD17	SD17 6 6	WENB ; LATCH ENABLE FOR WD0-WD7
7 15 16	RD20 RD21 RD22 RD23 RD24 RD25 RD26 RD27	MODE 17 SEL0 37 SEL1 36 RENB 35 RCK 76 WENB 75	OUTPUT SD00-SD07,8D10-SD17; READ DATA OUT FROM MEMORY INPUT/OUTPUT RD00-RD07,RD10-RD17,RD20-RD27,RD30-RD37; READ DATA IN/WRITE DATA OUT
45 48 47 68 69	RD30 RD31 RD32 RD33 RD34 RD35 RD36	WD0 3 1 WD1 3 2 WD2 3 4 WD3 7 0 WD4 7 1 WD5 7 2 WD6 7 4	

CXD8276Q (SONY)
C-MOS LINEAR INTERPOLATION
- TOP VIEW -

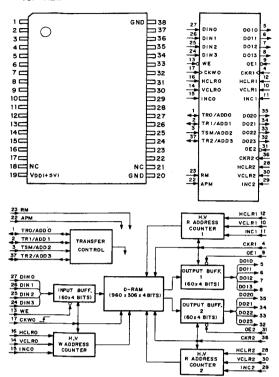


											(V DD = + 5V
PIN No.	1/0	SIGNAL	PIN No.	110	SIGNAL	PIN No.	170	SIGANL	PIN No.	1/0	SIGNAL
1	1	De	17	1	84	3 3	_	RAS	4 9	1	G2
2	1	D7	1 8	1	8.5	34	_	RBS	5 0	1	C3
3		AO	1.0		88	3.5	-	RAW	5 1	1	C4
4	1	A 1	20	-	87	36	_	RBW	5 2	ı	C5
5	1	A 2	21	0	RO	37	_	RND	6.3	1	Cē
6	i i	A S	2 2	٥	R 1	3.8	0	20	5 4		C7
7	ı	A4	23	0	R2	39	0	Q1	5 5	1	C8
	1	A 5	2.4	0	R3	4.0	٥	02	5 6		CK
9	-1	CLR	2.5	-	GND	41	٥	Q3	5 7	-	GND
10	- 1	GND	26		Y 00	4 2		GND	5 8	-	V DD
11	-1	AB	2 7	0	R4	43	٥	Q4	5 9		D0
12	ı	A 7	2 8	0	R5	44	٥	Q5	6.0		D1
13	ı	ВО	2 9	0	A 6	4.5	0	Q6	61	1	D2
14	1	B 1	30	0	A7	4.6	0	Q7	8 2		D3
1 5	1	B 2	31	1	MOD	47	1	CO	6.3		D4
16	1	В 3	3 2	1	MSQ	48	1	C1	64	1	D 5





CXK1206AM (SONY) FLAT PACKAGE
C.MOS VIDEO FIELD MEMORY (960-COLUMNx306-ROWx4-BIT)
- TOP VIEW -

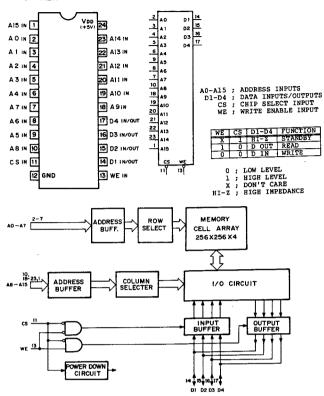


PIN	SIGNAL	DESCRIPTION
1	TRO/ADDO	W PORT O TRANSPER SYNC I/O. ADDRESS O INPUT
	TR1/ADD1	W PORT 0 TRANSFER SYNC I/O, ADDRESS 0 INPUT R PORT 1 TRANSFER SYNC I/O, ADDRESS 1 INPUT
3	TSM/ADD2	TRANSFER SYNCHRONOUS MODE. ADDRESS 2 INPUT
4	CKR1	R PORT 1 SHIFT SIGNAL INPUT
5	DO10	R PORT 1 TRANSFER SYNC I/O, ADDRESS 1 IMPUT TRANSFER SYNCHRONOUS MODE, ADDRESS 2 IMPUT R PORT 1 SHIFT SIGNAL IMPUT R PORT 1 DATA 0 OUTPUT R PORT 1 DATA 1 OUTPUT R PORT 1 DATA 2 OUTPUT R PORT 1 DATA 3 OUTPUT R PORT 1 OUTPUT ENABLE IMPUT R PORT 1 OUTPUT ENABLE IMPUT R PORT 1 VERTICAL CLEAR IMPUT R PORT 1 LINE IMCREMENT IMPUT
6	DO11	R PORT 1 DATA 1 OUTPUT
7	DO12	R PORT 1 DATA 2 OUTPUT
8	DO13	R PORT 1 DATA 3 OUTPUT
9	OE1	R PORT 1 OUTPUT ENABLE INPUT
10	VCLR1	R PORT 1 VERTICAL CLEAR INPUT
11	INCl	R PORT 1 LINE INCREMENT INPUT
12	HCLR1	R PORT 1 LINE INCREMENT INPUT R PORT 1 LINE INCREMENT INPUT W PORT 0 WRITE ENBALE INPUT W PORT 0 VERTICAL CLEAR INPUT W PORT 0 LINE INCREMENT INPUT W PORT 0 LINE INCREMENT INPUT W PORT 0 HORIZONTAL CLEAR INPUT
13	WE	W PORT 0 WRITE ENABLE INPUT
14	VCLR0	W PORT 0 VERTICAL CLEAR INPUT
15	INCO	W PORT 0 LINE INCREMENT INPUT
16	HCLRO	W PORT 0 HORIZONTAL CLEAR INPUT
17	CKWO	W PORT 0 HORIZONTAL CLEAR INPUT (no connection) 45V INPUT (SD (no connection) ADDRESS PRESET MODE INPUT RECURSIVE MODE ENABLE INPUT W PORT 0 DATA 3 INPUT W PORT 0 DATA 2 INPUT W PORT 0 DATA 1 INPUT W PORT 0 DATA 1 INPUT W PORT 0 DATA 1 INPUT PORT 2 HORIZONTAL CLEAR INPUT
18	NC	(no connection)
19	VDD	+5V INPUT
20	GND	GND
21	NC	(no connection)
22	APM	ADDRESS PRESET MODE INPUT
23	RM	RECURSIVE MODE ENABLE INPUT
24 25	DING	W PORT U DATA 3 INPUT
26	DINZ	W PORT U DATA 2 INPUT
27	DINI	W PORT 0 DATA 1 INPUT
28	DINO	W PORT U DATA U INPUT
29	THE	R PORT 2 HORIZONTAL CLEAR INPUT
30	TICE DO	R PORT 2 LINE INCREMENT INPUT R PORT 2 VERTICAL CLEAR INPUT R PORT 2 OUTPUT ENABLE INPUT R PORT 2 DATA 3 OUTPUT
31	OF2	D DODE 2 OFFICE CHARLE INDIE
32	0023	D DODE 2 DAMA 2 CHECKE
33	DO23	R PORT 2 DATA 3 COTTOT R PORT 2 DATA 2 OUTPUT
34		R PORT 2 DATA 1 OUTPUT
35	DO20	P PORT 2 DATA O OUTPUT
36	CKR2	P DODT 2 SHIPT SIGNAL INPUT
37	TR2/Ann3	R PORT 2 DATA 0 OUTPUT R PORT 2 SEIFT SIGNAL INPUT R PORT 2 TRANSPER SYNC I/O, ADDRESS 3 INPUT
38	GND	GND

n		ELECT	ION									
1	CONT											
1	INPU	TS	TS	TR/A		MODE						
	RM	APM	TSM	TR 0-2	ADD 0-3	NODE						
	0	0	0	OUT- PUT	-	NON RECURSIVE MODE, TRANSFER SYNCHRONOUS MODE OUTPUT						
	0	0	1	IN- PUT	-	NON RECURSIVE MODE, TRANSFER SYNCHRONOUS MODE INPUT						
	0	1	-	-	IN- PUT	NON RECURSIVE MODE, ADDRESS PRESET MODE						
	1	0	0	OUT- PUT	-	RECURSIVE MODE, TRANSFER SYNCHRONOUS MODE OUTPUT						
	1	0	1	IN- PUT	-	RECURSIVE MODE, TRANSFER SYNCHRONOUS MODE INPUT						

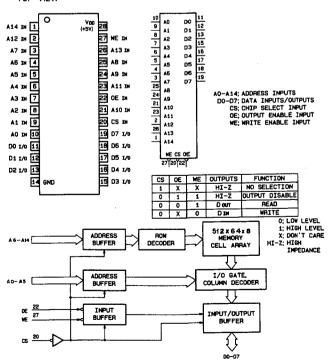
0:LOW LEVEL 1:HIGH LEVEL

CXK54256P-35 (SONY) (ACCESS TIME = 35nS)
C-MOS 256K (65536x4)-BIT STATIC RAM
- TOP VIEW -

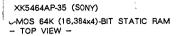


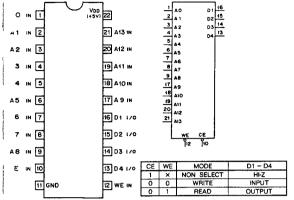
CXK58258AP-25 (SONY)

C-MOS 256K (32768x8)-BIT STATIC RAM - TOP VIEW -









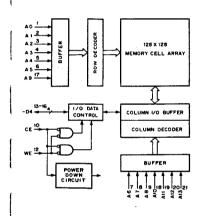
A0 - A13 : ADDRESS INPUTS

: ; CHIP ENABLE INPUT

I - D4 : DATA INPUTS/OUTPUTS

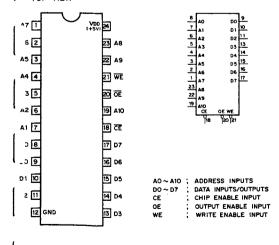
E : WRITE ENABLE INPUT

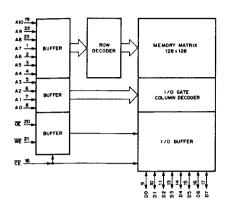
D ; LOW LEVEL I ; HIGH LEVEL X ; DON'T CARE



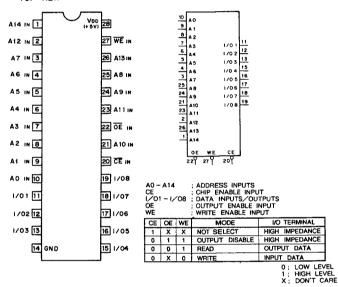
XK5814P-35 (SONY)

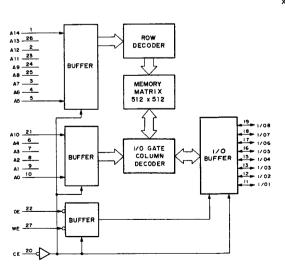
MOS 16K (2Kx8) STATIC RAM
TOP VIEW -





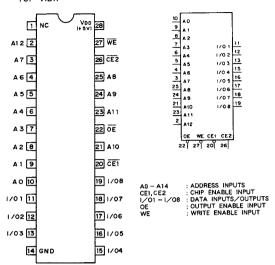
CXK58257AM-12LL (SONY) FLAT PACKAGE C-MOS 256K (32768x8)-BIT STATIC RAM - TOP VIEW -





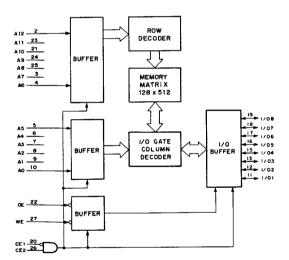
CXK5863P-25 (SONY)

C-MOS 8192-WORDx8-BIT HIGH SPEED STATIC RAM - TOP VIEW -



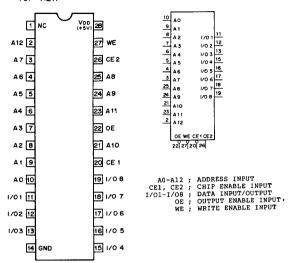
CE1	CE2	Œ	WE	MODE	I/O TERMINAL
1	х	Х	X	NOT SELECT	HIGH IMPEDANCE
х	0	X	X	NOT SELECT	HIGH IMPEDANCE
0	1	1	1	OUTPUT DISABLE	HIGH IMPEDANCE
0	1	0	1	READ	OUTPUT DATA
0	1	×	0	WRITE	INPUT DATA

0 : LOW LEVEL 1 : HIGH LEVEL X : DON'T CARE

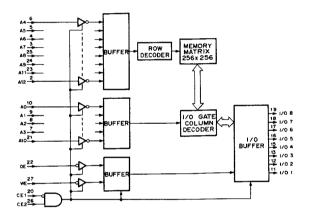


CXK5864BSP-70L (SONY)

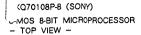
C-MOS 64K (8192x8)-BIT STATIC RAM - TOP VIEW -

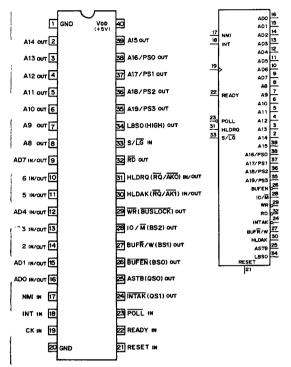


CEL	CE2	OE	WE	MODE	I/O TERMINAL	
	Х	X	X	NOT SELECT	HIGH IMPEDANCE	
Х	0	X	X	NOT SELECT	HIGH IMPEDANCE	
0	1	1	1	OUTPUT DISABLE	HIGH IMPEDANCE	0;LOW LEVEL
0	1	0	1	READ	OUTPUT DATA	1; HIGH LEVEL
0	1	Х	0	WRITE	INPUT DATA	X;DON'T CARE







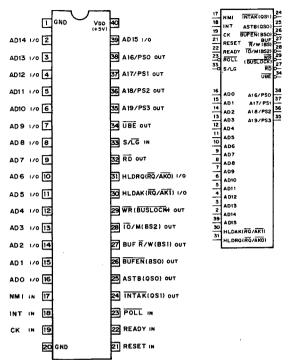


١				
I	ĪN	FUNC	ION	A8-A15; ADDRESS BUS OUTPUTS
١	٥.	S/EG=HIGH LEVEL	S/LG = LOW LEVEL	ADO-AD7; ADORESS/DATA BUS INPUTS/OUTPUTS
ŧ	1 24	INTAK	QS1	NMI; NON-MASKABLE INTERRUPT INPUT
	25	ASTB	QS0	INT; MASKABLE INTERRUPT INPUT
	26	BUFEN	BSO	CK; CLOCK INPUT INTAK; INTERRUPT ACKNOWLEDGE OUTPUT
١	7	BUF R/W	BS1	ASTB: ADDRESS STROBE OUTPUT
۱	8	10/ M	B\$2	BUFEN; BUFFER ENABLE OUTPUT
l	.9	WR	BUSLOCK	BUFR/W; BUFFER READ/WRITE OUTPUT
	30	HLDAK	RQ/AK1	IO/M; IO/MEMORY OUTPUT
	31	HLDRQ	RQ/AKO	WR; WRITE STROBE OUTPUT HLDAK; HOLD ACKNOWLEDGE OUTPUT
1	4	LBSO	HIGH LEVEL	HLDRO; HOLD REQUEST INPUT
ŀ				RD READ STROBE OUTPUT
l				S/LG; SMALL/LARGE INPUT
•				LBSO; LATCHED BUS STATUS O OUTPUT
			A16/PS	0-A19/PS3; ADDRESS BUS/PROCESSOR STATUS OUTPUTS
ĺ				QSO ,1; QUEUE STATUS OUTPUTS

QSO ,1; QUEUE STATUS OUTPUTS GSO,1; QUEUE STATUS OUTPUTS
BSO-BS2; BUS STATUS OUTPUTS
BUSLOCK; BUS LOCK OUTPUT
RQ/AKO,1; HOLD REQUEST/ACKNOWLEDGE
INPUTS/OUTPUTS

12 A16/PSO-A19/PS3 A6-A15 BUS BUFFER INTERNAL ADDRESS/DATA BUS(20) LBSO BUFEN (BSO), BUFR/W(BS1) ATSB (GSO), INTAK(OS1) 5/16 \$S POLL D\$ 1 + HLDRQ(RQ/AKO) T - STATE CONTROL BUS HOLD CONTROL PFP +HLDAK(RQ/AKI) TEMP CYCLE DECISION INTERRUPT CONTROL QO Q1 Q2 Q3 PC EFFECTIVE ADDRESS GENERATOR AW BW cw HADDRESS HINSTRUCTION STORAGE DW ΙX BP USEQUENCE CONTROL SP INSTRUCTION DECODER

CXQ70116P-10 (SONY)
C-MOS 16-BIT MICROPROCESSOR
- TOP VIEW -



AD15-AD0 ; ADDRESS/DATA BUS

NMI ; NON-MASKABLE INTERRUPT

INT ; MASKABLE INTERRUPT

CK ; CLOCK

INTAK ; INTERRUPT ACKNOWLEDGE

ASTB ; ADDRESS STROBE

BUFER ; BUFFER READ/WRITE

IO/M ; IO MEMORY

WR ; WRITE STROBE

HLDAK ; HOLD ACNOWLEDGE

HLDAK ; HOLD REQUEST

RD ; READ STROBE

S/LG ; SMALL/LARGE

A19/PS3-A16/PS0 ; UPFER BYTE ENABLE

A19/PS3-A16/PS0 ; UPFER BYTE ENABLE

BS2-BS0 ; BUS STATUS

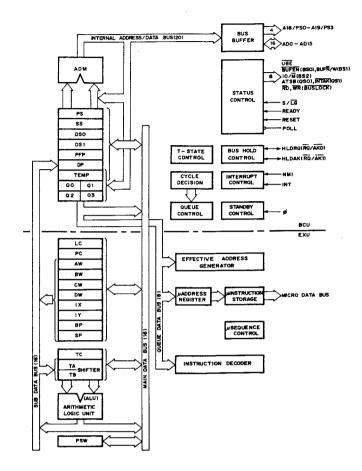
BUSLOCK ; BUS LOCK

RQ/AK1, 0 ; HOLD REQUEST/ACKNOWLEDGE

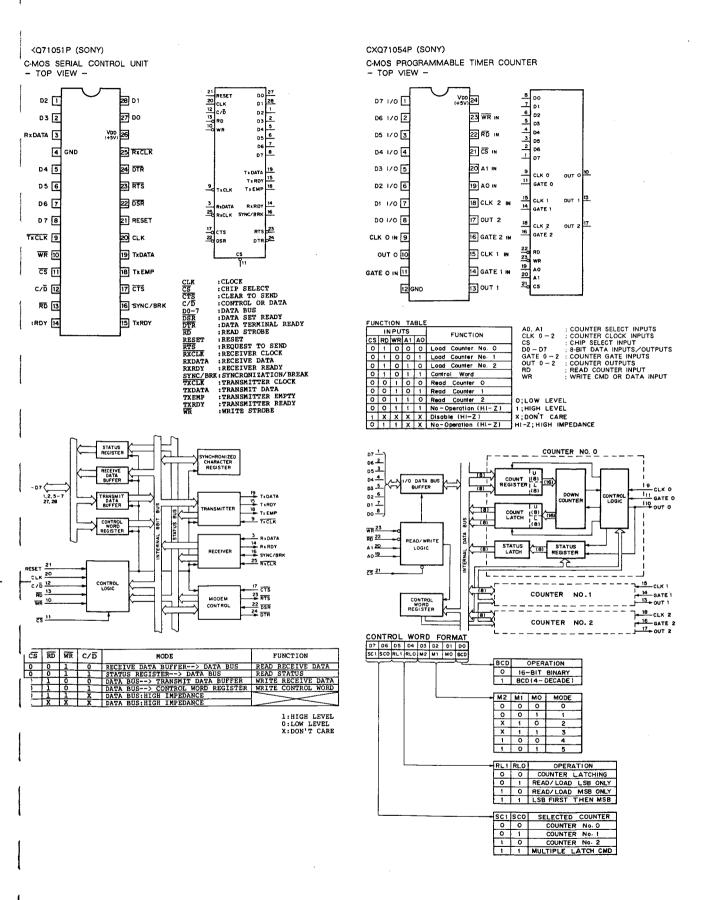
28 10/M BS2
29 WR BUSLOCK
30 HLDAK RQ/AK1
31 HLDRQ RQ/AKO

BS1

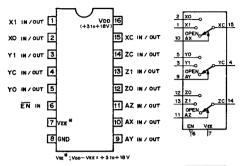
27





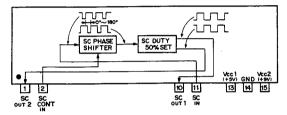


HD14053BFP (HITACHI) FLAT PACKAGE
C-MOS TRIPLE 2-CHANNEL ANALOG MULTIPLEXERS/DEMULTIPLEXERS
- TOP VIEW -

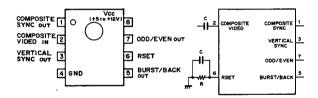


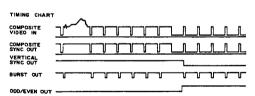
		I. INPUTS	ON
	EN	A (X,Y,Z,)	CHANNEL
O: LOW LEVEL	0	0	0
1 . HIGH LEVEL	0	1	1
X: DON'T CARE.	T	X	OPEN

IB-38 (AGC)
SC PHASE SHIFTER
- REAR VIEW -

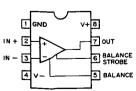


LM1881M (NS) FLAT PACKAGE VIDEO SYNC SEPARATOR - TOP VIEW -





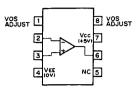
LM311PS (TI) FLAT PACKAGE VOLTAGE COMPARATOR WITH STROBE - TOP VIEW -



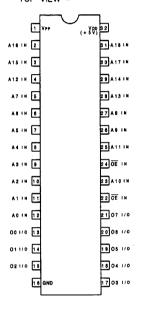
LM358PS (TI) FLAT PACKAGE DUAL OPERATIONAL AMPLIFIERS - TOP VIEW -

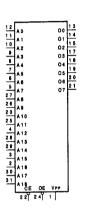


LM6361M (NEC) HIGH SPEED OPERATIONAL AMPLIFIER - TOP VIEW -



M27C4001-12F1 (SGS) C-MOS 4M-BIT UV EPROM - TOP VIEW -



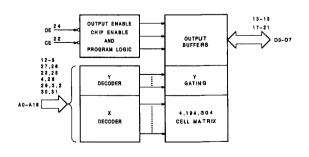


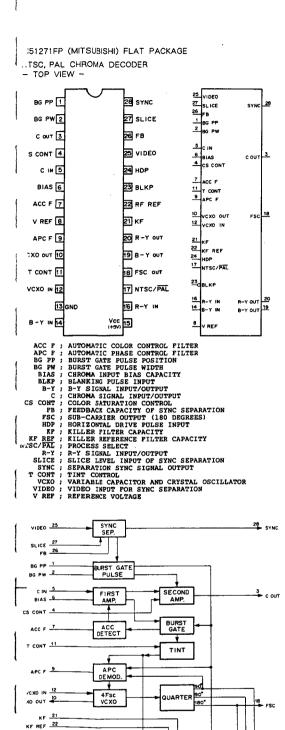
A0-A19:ADDRESS INPUTS
CE : CHIP ENABLE INPUT
O0-O7 ; DATA INPUTS/OUTPUTS
OE : OUTPUT ENABLE INPUT
VPP : PROGRAMMING VOLTAGE INPUT
(+ 12.75V)

MODE		18	PII		
MODE	00-07	Vpp	A 9	0E	CE
READ	D OUT	x	×	0	0
OUTPUT DISABLE	H1-2	x	x	1	0
STAND BY	H1-Z	×	x	x	1
PROGRAM	DIN	Vpp	×	1	0
PROGRAM VERIFY	D OUT	Vpp	x	0	1
PROGRAM INHIBIT	HI-Z	Vpp	x	1	1
ELECTRONIC SIGNATURE	CODE	Vpp	+ 12V	0	0

0 ;LOW LEVEL
1 ;HIGH LEVEL
X ;DON'T CARE
HI-Z:HIGH IMPEDANCE

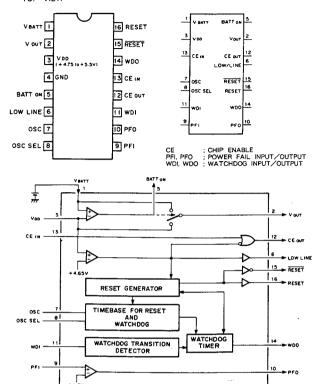
					CODE	DATA				
INDENTIFIER	A O	07	08	05	04	03	02	01	00	
MANUFACTURER CODE	0	0	0	1	0	0	0	0	0	20
DEVICE CODE	1	0	1	0	0	۰	0	0	,	4 1



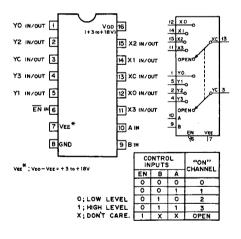


MAX691CPE (MAXIM)

C-MOS MICROPROCESSOR SUPERVISORY CIRCUITS – TOP VIEW –



MC14052BF (MOTOROLA) FLAT PACKAGE C-MOS DUAL 4-CHANNEL ANALOG MULTIPLEXERS/DEMULTIPLEXERS - TOP VIEW -



REF. VOLTAGE

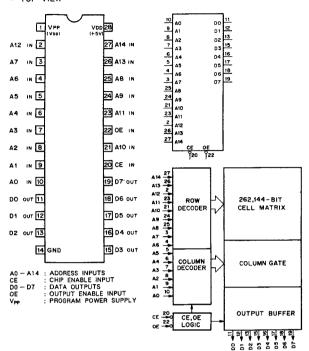
ID PULSE

<u>~270°</u>≪∫

B-Y DEMOD.

MBM27C256A-25CZ-X (FUJITSU)

C-MOS 256K (32Kx8)-BIT UV ERASABLE PROM WITH 3-STATE OUTPUTS TOP VIEW -



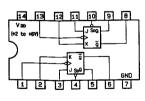
An	CE	ŌΕ	VDD	Vpp	Dn	FUNCTION				
An	0	0	+5V	+ 5V	D out	READ				
An	0	1	+5V	+5V	H1-Z	OUTPUT DISABLE				
×	1	×	+5V	+5V	HI-Z	STANDBY				
An	0	1	+6V	+12.5V	DIN	PGM				
An	1	0	+6V	+12.5V	Dout	PGM VERIFY(1)	O:LOW LEVEL			
An	0	0	+6V	+ 12.5V	Dout	PGM VERIFY(2)	1:HIGH LEVEL			
×	1	1	+6V	+12.5V		PGM INH	X:DON'T CARE			
AO	0	0	+5V	+5V	DEVICE CODE	ELECTRONIC SIGNATURE*	HI-Z:HIGH IMPEDANCE			
					* SEE	FOLLOWING DESCRIPTION	•			
ELEC.	ELECTRONIC SIGNATURE FOR P ROM WRITER									
ADD	ADDRESS SETTINGS IN READ MODE									
	1 - 48	I AC	A IO	- A13	A14. Vpp					

MUURI		25111	INGS IN RE	AU MOUL
A1-	- A8	A9	A10-A13	A14,Vpp
0		127	0	1

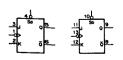
CODE DATA										
	AO	D7	D6	D5	D4	D3	D2	D1	DO] _
MAKER CODE	0	0	0	0	0	0	1	0	0	04H
DEVICE CODE	1	0	1	1	0	0	0	1	0	62H

MC74HC113F (MOTOROLA) FLAT PACKAGE SN74HC113NS (TI) FLAT PACKAGE

C-MOS J-K FLIP-FLOP WITH SET - TOP VIEW -

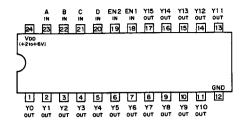


	INP	UTS	OUTPUTS						
So	CK	J	K	Q	ā				
0	Х	Х	X	1	0				
1	۲	0	0	NO C	HANGE				
1	T.	0	1	0	1				
1	_	1	0	1	0				
1 *	7_	1	1	TOGGLE					
1	1	X	X	NO C	HANGE				
1	0	X	X	NO C	HANGE				
1	5	Х	Х	NO C	HANGE				
	: LOW LEVEL X: DON'T CARE								



MC74HC154N (MOTOROLA)

C-MOS 4-TO-16 LINE DECODER/DEMULTIPLEXER - TOP VIEW -



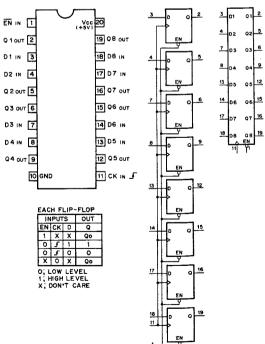


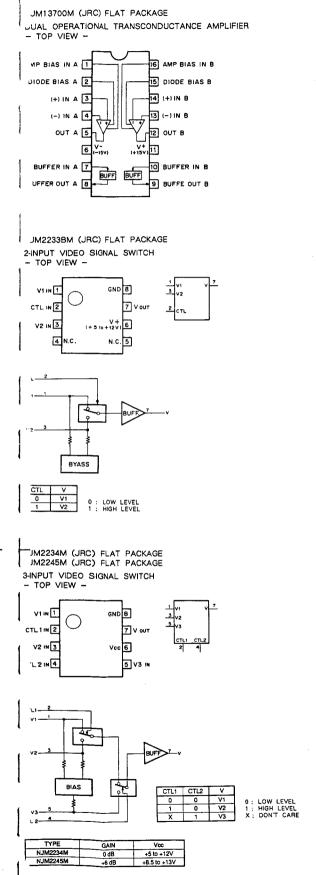
INPUTS										_	UTI	UT	s	_							
FN1	EN2	_	c	В	A	Y15	Y14	Y13	Y12	Y1 1	Y10			Y7		Y5	Y4	Y3	Y2	Y1	YO
0	0	ō	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0
0	0	o	0	ō	1	1	1	1	1	1	1	1	1	1	۱, ا	1	1	1	1	0	1
0	0	0	0	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1
0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1
٥	0	0	1	٥	0	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1
0	0	0	1	٥	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1
0	0	0	1	1	0	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1
0	0	٥	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1
0	0	1	0	0	0	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	١.
٥	0	1	0	0	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1
0	0	1	0	1	٥	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1
0	0	1	0	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1
0	0	1	1	0	٥	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1
0	0	1	1	0	1	1	1	0	1	ı	1	1	1	1	1	[1	1	1	1	1	1
0	0	1	l١	1	0	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1
0	0	1	1	1	1	0	1	1	1	1	,	1	t	1	1	1	1	1	1	1	1
x	1	x	×	x	x	1	1	1	1	1	1	1	1	1	1	1	1	1	וי	1	1
1	x	x	x	x	×	1	1	1	1	1	1	1	1	1	1	1	1	1.	1	1	1

- O; LOW LEVEL 1; HIGH LEVEL X; DON'T CARE

N74F377N (SIGNETICS)

TTL D-TYPE FLIP-FLOP WITH ENABLE - TOP VIEW -





TYPE	GAIN	Vcc
NJM2235M	0 dB	+5 to +15V
NJM2246M	+6 dB	+4.75 to +13\

NJM78L05A (JRC) + 5V (100mA) NJM78L09A (JRC) + 9V (100mA) POSITIVE VOLTAGE REGULATOR

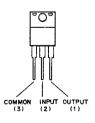


-3 IN OUT

NJM360M (JRC) FLAT PACKAGE HIGH SPEED VOLTAGE COMPARATOR (TTL OUTPUT) - TOP VIEW -

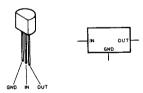


NJM7905FA (JRC) - 5V NJM7909FA (JRC) - 9V NEGATIVE VOLTAGE REGULATOR - FRONT VIEW -



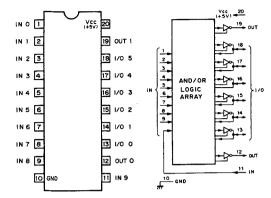
2 INPUT OUTPUT 1 COMMON 3

NJM79L09A (JRC) - 9V NEGATIVE VOLTAGE REGULATOR (100mA)



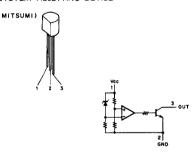


PAL16L8BCN (AMD/MONOLITHIC MEMORIES) PROGRAMMABLE LOGIC DEVICE - TOP VIEW -



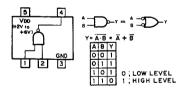
* ABOVE DIAGRAM SHOWS CONDITIONS BEFORE PROGRAMMING.

PST523C (MITSUMI) 4.5V SYSTEM RESETTING DEVICE

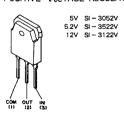


REF.; REFERENCE VOLTAGE

SC7SOOF (MOTOROLA) FLAT PACKAGE C-MOS 2-INPUT NAND GATE - TOP VIEW -



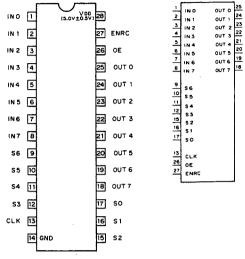
SI-3522V (SANKEN) POSITIVE VOLTAGE REGULATOR (2A)



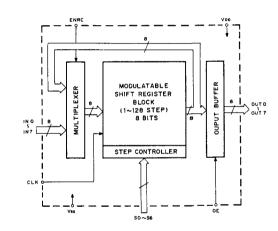


SM5828P (NPC)

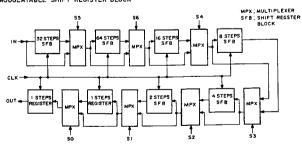
C-MOS 128 STEPS 8 BITS PROGRAMABLE SHIFT REGISTER - TOP VIEW -



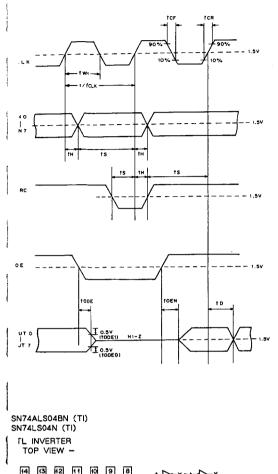
CLK ; CLOCK INPUT ENRC ; CIRCULATION CONTROL INO-INT ; DATA INPUT OE ; OUTPUT ENABLE OUTO-OUTT ; DATA OUTPUT SO-S6 ; REGISTER LENGTH SELECT

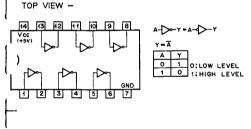




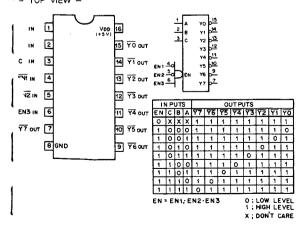






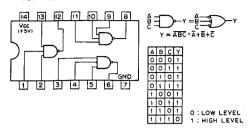


SN74ALS138N (TI) N74LS138N (TI) TL 3-TO-8-LINE DECODER/DEMULTIPLEXER - TOP VIEW -



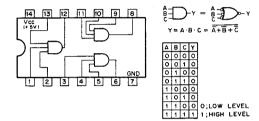
SN74ALS10AN (TI) SN74LS10N (TI)

TTL 3-INPUT POSITIVE NAND GATE - TOP VIEW -



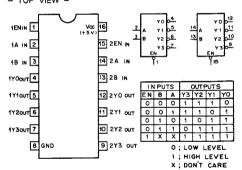
SN74ALS11AN (TI)

TTL 3-INPUT POSITIVE-AND GATE - TOP VIEW -



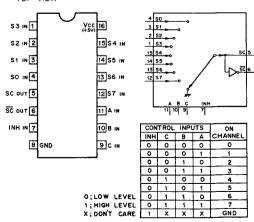
SN74ALS139NS (TI) FLAT PACKAGE SN74LS139AN (TI)

TTL 2-TO-4-LINE DECODER/DEMULTIPLEXER - TOP VIEW -



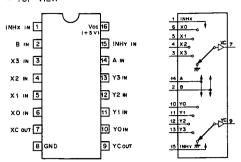
SN74ALS151N (TI)

TTL 8-LINE-TO-1-LINE DATA SELECTOR/MULTIPLEXER - TOP VIEW -



SN74ALS153N (TI)

TTL 4-LINE-TO-1-LINE DATA SELECTOR/MULTIPLEXER - TOP VIEW -

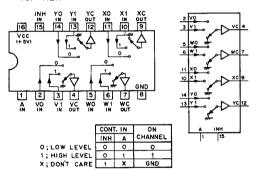


COM	TROL	IM	ON
INH	В	A	CHANNEL
0	0	0	0
0	0	1	1
0	1	0	2
0	1	1	3
1	х	X	GND

0:LOW LEVEL 1:HIGH LEVEL X:DON'T CARE

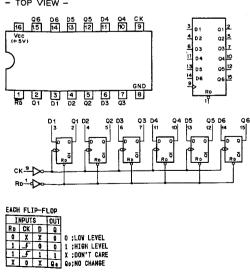
SN74ALS157AN (TI)

TTL QUAD 2-LINE-TO-1-LINE DATA SELECTORS/MULTIPLEXERS — TOP VIEW —



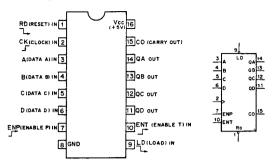
SN74ALS174N (TI) SN74LS174N (TI)

TTL HEX D-TYPE FLIP-FLOPS WITH DIRECT RESET



SN74ALS161BN (TI)

TTL PRESETTABLE SYNCHRONOUS 4-BIT BINARY COUNTER - TOP VIEW -



CON	TROL	INP	UTS	HODE
₽D	LD	ENP	ENT	MODE
0	x	×	x	RESET (ASYNCHRONOUS
1	0	×	x	PRESET (SYNCHRONOUS)
1	1	0	x	NO COUNT
1	1	Х	0	NO COUNT
1	1	1	1	COUNT

1; HIGH LEVEL X; DON'T CARE



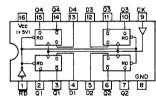
CO IS HIGH WHEN ENT INPUT IS HIGH AND COUNT IS "15".

COUNT SEQUENCE									
COUNT		OUTPUTS							
COUNT	Q	QC.	QB	QA					
0	0	0	0	0					
1	0	0	0	1					
2	0	0	1	0					
3	٥	0	1_	1					
4	0	1	0_	0					
5	0	1	0	1					
6	0	1	1	0					
7	0	1	1	1					
8	1_	0	0	0					
9	1_	0	٥	1					
10	- 1	0	1	0					
11	1	0	1	1					
12	1	_1_	0	0					
13	1	1	٥	1					
14	1	1	1	0					
15	1	1	1	1					

SN74ALS175N (TI) SN74LS175N (TI)

TTL D-TYPE FLIP-FLOP WITH CLEAR

- TOP VIEW -

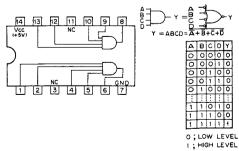


			_	١.
4	D1		01 01	2 3
5	02		ot lo 000 0 10 0	6
12	03		03	얼=
13	D4		Q4	\$21
9	┡		ō4	F
		RD		
		۱۱		

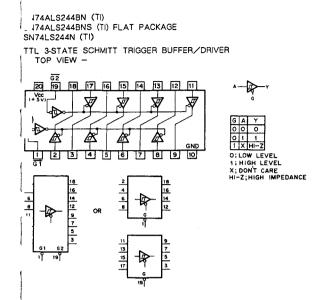
RD	СК	D	Q	ō	
0	X	X	0	1	
1	7	1	1	0	O;LOW LEVEL
1	5	0	0	1	1; HIGH LEVEL
1	0	X	Qo	Ö	X;DON'T CARE

SN74ALS21AN (TI) SN74LS21N (TI)

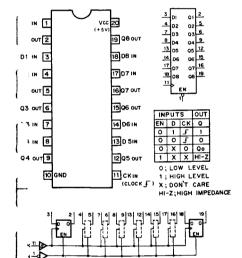
TTL 4-INPUT POSITIVE AND GATE - TOP VIEW -



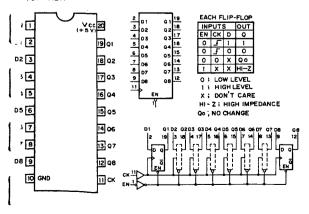




C^I74ALS374AN (TI)
| 174LS374N (TI)
| 'L 3-STATE OUTPUTS OCTAL D-TYPE FLIP-FLOP
| TOP VIEW | -

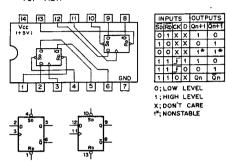


√74ALS574BNS (TI) FLAT PACKAGE
.:L 3-STATE D-TYPE EDGE-TRIGGERED FLIP-FLOP
- TOP VIEW -

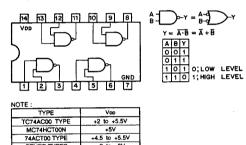


SN74ALS74AN (TI) SN74LS74AN (TI) SN74LS74ANS (TI) FLAT PACKAGE

TTL D-TYPE FLIP FLOP WITH DIRECT SET/RESET - TOP VIEW -

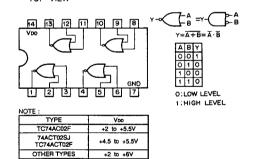


SN74HC00ANS (TI) FLAT PACKAGE C-MOS QUAD 2-INPUT NAND GATES - TOP VIEW -

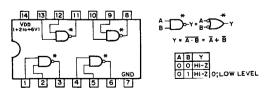


SN74HC02ANS (TI) FLAT PACKAGE C-MOS QUAD 2-INPUT NOR GATES - TOP VIEW -

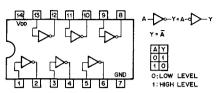
OTHER TYPES



SN74HC03NS (TI) FLAT PACKAGE
C-MOS 2-INPUT POSITIVE-NAND GATE WITH OPEN-DRAIN
- TOP VIEW -

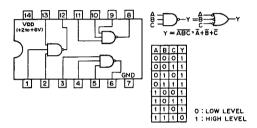


SN74HC04ANS (TI) FLAT PACKAGE C-MOS HEX INVERTERS - TOP VIEW -

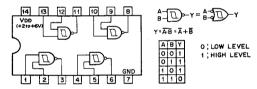


NOTE:	
TYPE	VDD
74HCT04 TYPE	+5V
TC74AC04 TYPE	+2 to +5.5V
74ACT04 TYPE	+4.5 to +5.5V
OTHER TYPES	+2 to +6V

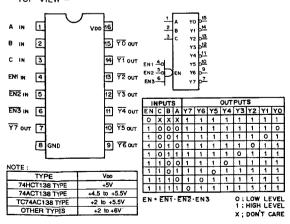
SN74HC10ANS (TI) FLAT PACKAGE C-MOS 3-INPUT NAND GATE - TOP VIEW -



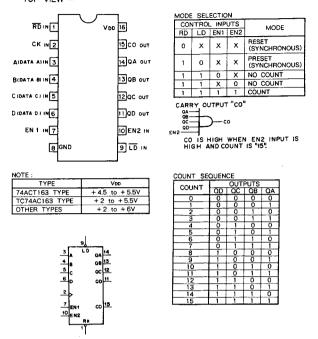
SN74HC132ANS (TI) FLAT PACKAGE C-MOS 2-INPUT NAND SCHMITT TRIGGER - TOP VIEW -



SN74HC138ANS (TI) FLAT PACKAGE
C-MOS 3-TO-8 LINE DECODER/DEMULTIPLEXER
- TOP VIEW -



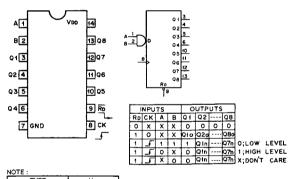
SN74HC163ANS (TI) FLAT PACKAGE
C-MOS PRESETTABLE SYNCHRONOUS 4-BIT BINARY COUNTER
- TOP VIEW -

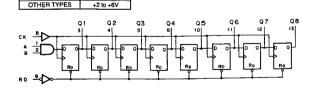


SN74HC164ANS (TI) FLAT PACKAGE

C-MOS 8-BIT SERIAL-IN/PARALLEL-OUT SHIFT REGISTER

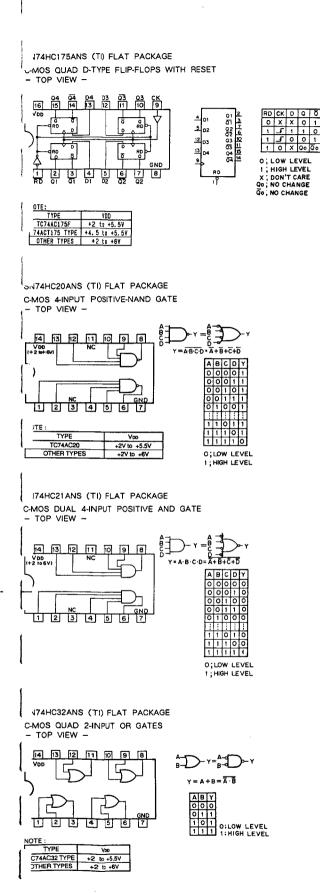
- TOP VIEW --





TC74AC164 TYPE

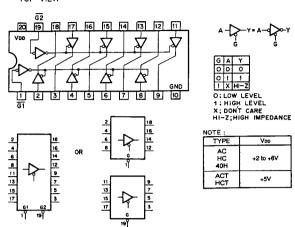
+2 to +5.5V



SN74HC244ANS (TI) FLAT PACKAGE

C-MOS BUS BUFFER WITH 3-STATE OUTPUTS

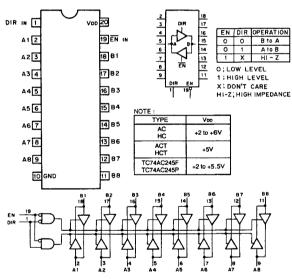
- TOP VIEW -



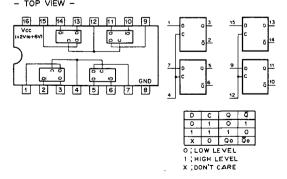
SN74HC245ANS (TI) FLAT PACKAGE

C-MOS BILATERAL BUS TRANSCEIVERS WITH 3-STATE OUTPUTS

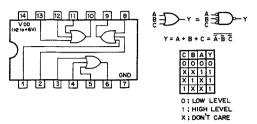
- TOP VIEW -



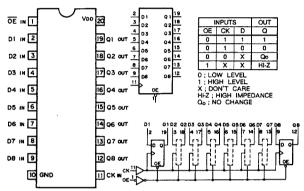
SN74HC375ANS (TI) FLAT PACKAGE C-MOS 4-BIT BISTABLE LATCHES - TOP VIEW -



SN74HC4075ANS (TI) FLAT PACKAGE C-MOS 3-INPUT OR GATE - TOP VIEW -



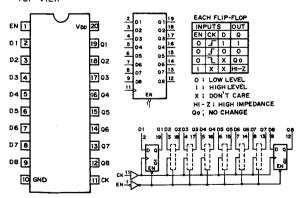
SN74HC573BNS (TI) FLAT PACKAGE C-MOS 3-STATE OUTPUTS OCTAL LATCHES - TOP VIEW -



NOTE:	
TYPE	Voo
AC	+2 to +6V
HC	1 +210+01
ACT	+5V
HCT] +3V
TC74AC573	+2 to +5.5V

SN74HC574ANS (TI) FLAT PACKAGE SN74HCT574ANS (TI) FLAT PACKAGE

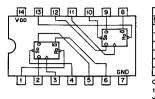
C-MOS 3-STATE D-TYPE EDGE-TRIGGERED FLIP-FLOP - TOP VIEW -



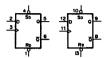
TYPE	Voo			
74AC/74HC	+2 to +6V			
74ACT/74HCT	+ 5V			
TC74AC574F	+ 2 to + 5.5V			

SN74HC74ANS (TI) FLAT PACKAGE

C-MOS DUAL D-TYPE FLIP-FLOPS WITH DIRECT SET/RESET - TOP VIEW -

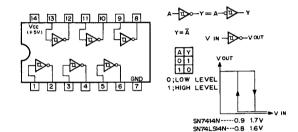


_		_	_		_			
۱N	ΙPU	ITS		OUTF				
50	120	СК	D	Qn+i	Qn+1			
0	1	X	X	1	0			
1	0	×	X	0	1			
0	0	×	X	-	1			
1	1	5	1	1	0			
1	1	4	0	0	1			
1	1	0	X	ć	iq			
LOW LEVEL								
				VEL				
•								



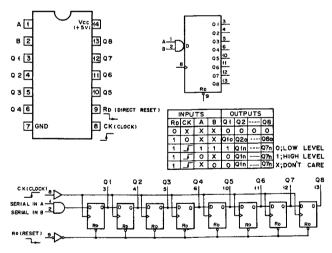
NOTE:	
TYPE	Vpp
TC74HCT74AF	+5٧
TC74AC74 TYPE	+2 to +5.5V
74ACT74 TYPE	+4.5 to +5.5V
OTHER TYPES	+2 to +6V

SN74LS14NS (TI) FLAT PACKÄGE TTL SCHMITT TRIGGER INVERTER - TOP VIEW -



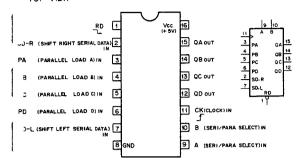
SN74LS164N (TI)

TTL 8-BIT PARALLEL-OUT SERIAL SHIFT REGISTER - TOP VIEW -





, TL 4-BIT BIDIRECTIONAL UNIVERSAL SHIFT RESISTER TOP VIEW -

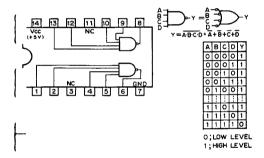


٠				Ü	NPUTS							OUT	PUTS		
	₹D	MC	DDE	ск	SERI	AL	P/	RALL	EL L	DAD	O A	Q B*	oc.	Q D	1
	, 0	В	Α	CK	SD-L	SD-R	PA	PB	PC	PD	٧.	<u> </u>	40	40	l
١.	0	X	Х	X	X	×	×	×	X	X	0	0	<u> </u>	0	
1	1	×	х	0	X	X	×	X	X	X	QAo	Q8°	QC o	QDo	
ı	1	1	1	5	X	X	A	В	С	D.	Α	8	С	D.	DAOL
, ,	1	0	1	7	X	1	X	X	×	X	1_	QAn	QBn	QCn	OA-OD
	1	0	1	Ţ	×	0	X	X	Х	X	0	QAn	QBn	QCn	94-40
	1	1	Ö	5	1.	×	X	X	×	X	QBn	QCn	QDn	1	QA-QD
ı	1	1	0	1	0	x	x	х	х	X	QBn	QCn	QDn	0	944
ì	1	0	0	X	X	X	×	×	чx	X	QAo	QBo	QCo	QDo	ł

A.B.C.D=THE LEVEL OF STEADY-STATE INPUT AT PAPER COR PD. RESPECTIVELY.
QAo., QBo., QCo., QDo. THE LEVEL OF QA. QB. QC. OR OD RESPECTIVELY. BEFORE THE
INDICATED STEADY-STATE INPUT CONDITIONS WERE ESTABLISHED
QAn., QBn., QCn., QDn. THE LEVEL. OF QA.D.B.C. OR QD. RESPECTIVELY, BEFORE MOST
O=LOW LEVEL 1+HIGH LEVEL X-DON'T CARE

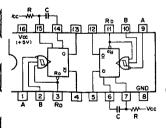
N74LS20N (TI)

TL 4-INPUT POSITIVE NAND GATE - TOP VIEW -

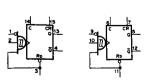


N74LS221NS (TI) FLAT PACKAGE

.TL MONOSTABLE MULTIVIBRATOR WITH SCHMITT TRIGGER INPUT – TOP VIEW –



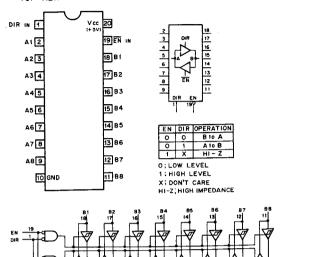
IN	PUT	5	OUT	PUTS	ŀ
RD	A	В	G	Q	
0	Х	X	0	1	1
х	1	X	0	1	
х	X	0	0	1	1
1	٥	1	5	L	O;LOW LEVEL
1	+	1	5	·	1 HIGH LEVEL
Ť	0	1	1	Ĺ	X DON'T CARE



SN74LS245N (TI)

TTL BILATERAL SCHMITT TRIGGER BUS TRANSCEIVERS WITH 3-STATE OUTPUTS

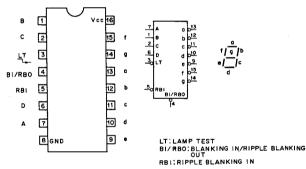
- TOP VIEW -



SN74LS247NS (TI) FLAT PACKAGE

TTL BCD-TO-SEVEN-SEGMENT DECODER/DRIVER
(OPEN COLLECTOR OUTPUT)

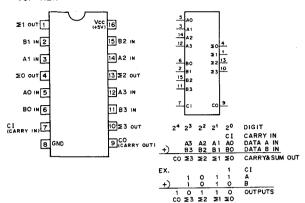
TOP VIEW —



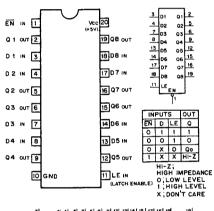
		INF	UTS	;					דטס	FPUT	s			DISPLAY	DECIMAL
LT	RBI	D	С	В	Α	B I/RBO	a	Ь	c	ď	•	f	G	HEXADECIMAL	DEGIMAL
1	0	0	٥	0	0	1	0	0	٥	٥	0	0	1		0
1	×	٥	0	0	1	1	1	0	0	1	1	1	1	1	1
ī	x	0	0	1	0	1	٥	0	1	0	0	1	0	2	2
1	X	٥	0	1	_1	1	0	0	0	0	1	-	0	3	3
1	X.	0	1	0	0	1	-	0	0	1	.1	٥	_o_	4	4
1	X	0	1	0	. 1	1	٥	1	0	0	1	0	0	5	5
1	×	٥	1	1	0	1	٥	1	0	0	0	0	0	5	6
1	X	0	1	1	1	1	٥	0	0	1	1	1	1	7	7
	×	1	٥	0	0	1	٥	0	0	0	0	0	0	8	8
1	X	1	0	0	1	1	0	0	0	0	1	0	0	9	9
1	×	1	0	1	0	1	1	1	1	0	0	. 1	0		10
1	X	1	0	1	1	1	1_1_	1	0	0		1	0		11
1	×	1	1	0	0	1	1	٥	1	1	1	٥	0	世	12
1	X	1	1	0	1	1	0	١.	1	0	1	0	0		13
٢	X	1	1	1	0	1	1	1	1	٥	0	0	0		
1	i x	1	1 1	11	1	1	1_	1	1 1	1_	1	1	1	BLANK	15
X	×	X	X	×	х	0	1	1	1	1	1 1	1	1	BLANK	15
-	0	0	0	0	0	o*	1	1	1	1	1	1	1	BLANK	15
9	X	х	X	X	Х	1	٥	0	0	0	0	0	0	8	
,	1 1	0	0	0	0	1	1	1	1	1	1 1	1	1 1	BLANK	15

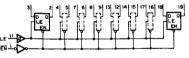
^{*} When RBI and inputs A,B,C, and D are at a low "0" level with the LT input high "H", all segment outputs go off (") and the RBO goes to a low "0" level (response condition).

SN74LS283NS (TI) FLAT PACKAGE TTL 4-BIT BINARY FULL ADDER -- TOP VIEW -



SN74LS373N (TI)
TTL 3-STATE OUTPUTS OCTAL LATCHES
- TOP VIEW -



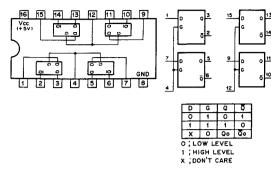


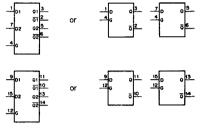
TA7805S (TOSHIBA) + 5V
POSITIVE VOLTAGE REGULATOR (0.5A)
- SIDE VIEW -



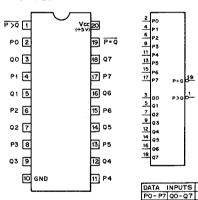


SN74LS375N (TI)
TTL BISTABLE LATCH
- TOP VIEW --





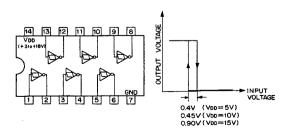
SN74LS684N (TI)
TTL 8-BIT MAGNITUDE COMPARATOR
WITH TOTEM-POLE OUTPUTS
- TOP VIEW -



TYPE	INPUT	OUTPUT
LS682	VITH 20K-OHK	TOTEN-POLE
L\$683	PULL UP	OPEN-COLLECTOR
LS684	VITHOUT	TOTEH-POLE
LS685	PULL UP	OPEN-COLLECTOR

| DATA INPUTS | OUTPUTS | PO-PT | QO-Q7 | P=Q | P>Q | P=Q | P>Q |

TC4584BF (TOSHIBA) FLAT PACKAGE C-MOS SCHMITT TRIGGER INVERTER - TOP VIEW -



:4S66F (TOSHIBA)

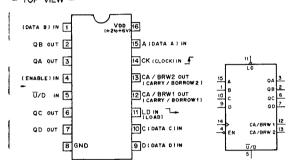
C-MOS BILATERAL ANALOG SWITCH - TOP VIEW -





:74HC191AF (TOSHIBA) FLAT PACKAGE

C-MOS PRESETTABLE SYNCHRONOUS 4-BIT BINARY UP/DOWN COUNTER - TOP VIEW -



CON	TROL	NPUTS	MODE		
LD	EN	Ū/D	MODE		
0	х	×	PRESET (ASYNCHRONOUS)		
1	1	×	NO COUNT		
1	0	0	UP COUNT		
1	0	1	DOWN COUNT		

D; LOW LEVEL 1; HIGH LEVEL X; DON'T CARE.

1	COUNT	Γ''	OUTF	PUTS	
1	COUNT	QD	QC	QB	QA
1	0	0	0	0	0
)	1	0	0	0	1
1	2	0	0	1	0
1	3	0	0	1	1
1	4	0	. 1	0	0
-	5	0	1	0	1
	6	0	1_	1	0
	7	0	1	1_	1
	8	1	0	0	0
	9	1	0	0	1
	10	1	0	1	0
	11	1	0	1	1
	12	1	1	0	0
	13	1	1	0	1
	14	1	1	1	0
	15	1_	1	1	1

COUNT SEQUENCE

COUNT

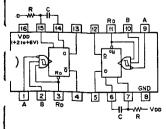
CA/8RW

CA/BRW1 OUTPUT IS HIGH WHEN COUNT IS "15" AT UP-COUNT OR WHEN COUNT IS "O" AT DOWN COUNT.

 $\ensuremath{\mathsf{L/BRW2}}$ output is low when both the clock and en inputs are w and ca/brw1 output is high.

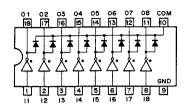
:74HC221AF (TOSHIBA) FLAT PACKAGE

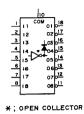
C-MOS MONOSTABLE MULTIVIBRATOR WITH SCHMITT TRIGGER INPUT – TOP VIEW –

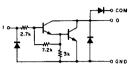


١	IN	PUT	s	OUT	PUTS	}
ļ	Rρ	A	В	9	10	
-	0	×	Х	0	1]
1	X	1	X	0	1	
	Х	X.	0	0	1]
	1	0	Ť	7	\Box	O;LOW LEVEL
	1	1	1	7	Ę	1; HIGH LEVEL
1	Ť	0	1	Γ	J	X;DON'T CARE
υ	TPU	IT P	ULS	E WI	DTH:	= 0.7CR

TD62083AP (TOSHIBA) DARLINGTON DRIVER

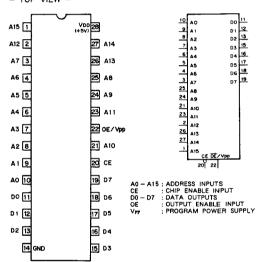






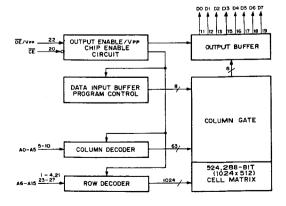
TMS27C512-20JL (TI)

C-MOS 512K (65,536x8 = 524,288)-BIT ERASABLE PROM - TOP VIEW -



An	CE	OE /Vrr	VDD	Dη	FUNCTION
A _D	0	0	+5V	Dout	READ
AΝ	0	1	+5V	HI-Z	OUTPUT DISABLE
X	1	Х	+5V	HI-Z	STANDBY
An	0	+12.5V	+6٧	DIN	PGM
AIN	0	0	+6٧	Dout	PGM VERIFY
Х	ī	+12.5V	+67	HI-Z	PGM INH

0 : LOW LEVEL 1 : HIGH LEVEL X : DON'T CARE HI-Z : HIGH IMPEDANCE

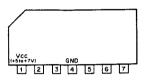




TL082CPS (TI) FLAT PACKAGE OPERATIONAL AMPLIFIER (JFET INPUT) - TOP VIEW -



UPC1037HA (NEC) DOUBLE-BALANCED MODULATOR - SIDE VIEW -

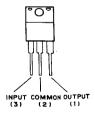




UPC311G2 (NEC) FLAT PACKAGE VOLTAGE COMPARATOR - TOP VIEW -



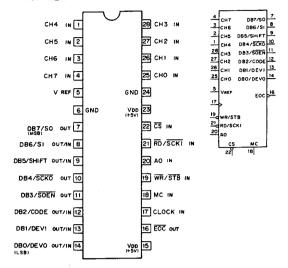
XRA17809T (EXAR) +9V POSITIVE VOLTAGE REGULATOR - FRONT VIEW -





UPD7004C (NEC)

C-MOS 10-BIT SUCCESSIVE COMPARATOR TYPE A/D CONVERTER - TOP VIEW -



AO ; CONTROL ADDRESS INPUT CHO~7; ANALOG INPUT CODE ; CODE SELECT (2'S COMPLEMENT/ BINARY) INPUT

BINARY) INPUT

CS ; CHIP SELECT INPUT

DBO~7; DATA BUS INPUT/OUTPUT

DEVO,

DEVI ; CLOCK RATE SELECT INPUT

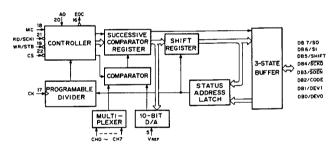
; CONVERSION ENDING SIGNAL OUTPUT ; MODE SELECT INPUT ; READ SIGNAL INPUT

SERIAL CLOCK INPUT SERIAL CLOCK OUTPUT SHIFT SELECT (LSB FIRST/ MSB FIRST) SCKI SHIFT

SERIAL INPUT

; SERIAL OUTPUT ; SERIAL OUTPUT ENABLE OUTPUT ; ADDRESS WRITE STROBE SIGNAL SOEN STB

INPUT ; WRITE SIGNAL INPUT



MC	MODE
٥	SERIAL
1	PARALLEL

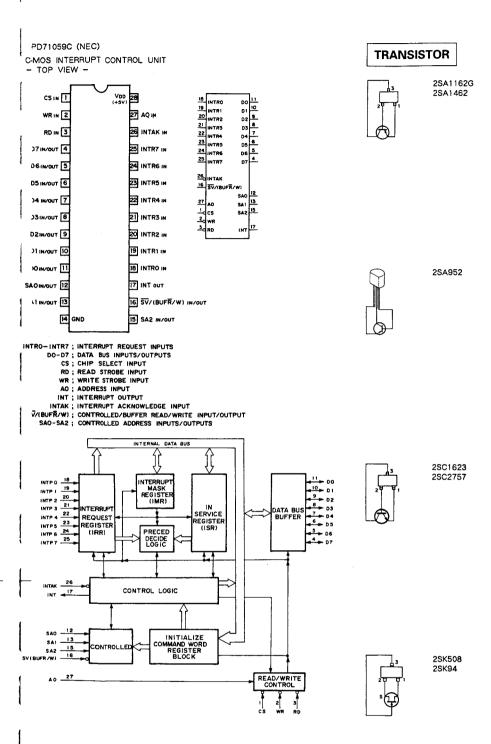
PARA	ALLE	_ MO	DE	
ζŚ	WR	RD	AO	MODE
1	X	X	Х	HIGH IMPEDANCE
0	1	1	X	HIGH IMPEDANCE
0	0	1	0	*1 ANALOG CHANNEL SELECT
0	0	1	1	#2 CODE SELECT/ #3 CLOCK RATE SELECT
0	1	0	0	#4 LOW-BYTE DATA OUTPUT
0	1	0	1	#4 HIGH-BYTE DATA OUTPUT
0	0	0	X	INHIBIT

O; LOW LEVEL X: DON'T CARE

SEL2	SEL 1	SELO	MPX CHAN.		
0	٥	0	CHO		
0	0	1	CHI		
0	1	0	CH 2		
0	1	1	CH3		
1	0	0	CH4		
1	0	1	CH5		
1	1	0	CH6		
1	1	1	CH7		

#2 C	ODE SELECT	#3 CLOCK RATE SELECT				
CODE	CODE SELECT	DEV1	DEV 0	CLOCK RATE		
٥	BINARY DATA	0	0	1		
1	2'S COMPLEMENT DATA	0	1	1/2		
		1	0	1/4		
		1	1	1/8		

*4 LOW/HIGH-BYTE DATA												
	DB7	DB 6	085	DB4	DB3	DB2	DB 1	DB 0				
HIGH-BYTE	MSB	2ND	3RD	4TH	5TH	6TH	7TH	8TH				
I OW- BYTE	9TH	0	0	0	0	0	0	0				





SECTION 8 SPARE PARTS

8-1. NOTES ON SPARE PARTS

(1) Safety Related Coponents Warning

Components marked with $\underline{\Lambda}$ on the schematic diagrams, exploded views and electrical spare parts list are critical to safe operation.

Replace these components with Sony parts whose part numbers appear in this manual or in service bulletins and service manual supplements published by Sony.

(2) Standardization of Parts

Spare parts supplied from Sony Parts Center may not always be identical with the parts actually in use due to accommodating the improved parts and/or engineering changes or standardization of genuine parts.

This manual's exploded views and electrical spare parts list indicate the part numbers of the standardized genuine parts at present.

(3) Stock of Part

Parts marked with "o" in the SP(Supply code)column of the spare parts list are not normally required for routine service work. Orders for parts marked with "o" will be processed, but allow for additional time for delivery.

(4) Units for Capacitors, Inductors and resistors

The following units may be assumed in schmatic diagrams, electrical parts list and exploded views unless otherwise specified.

Capacitor: µ F

Inductor: µH

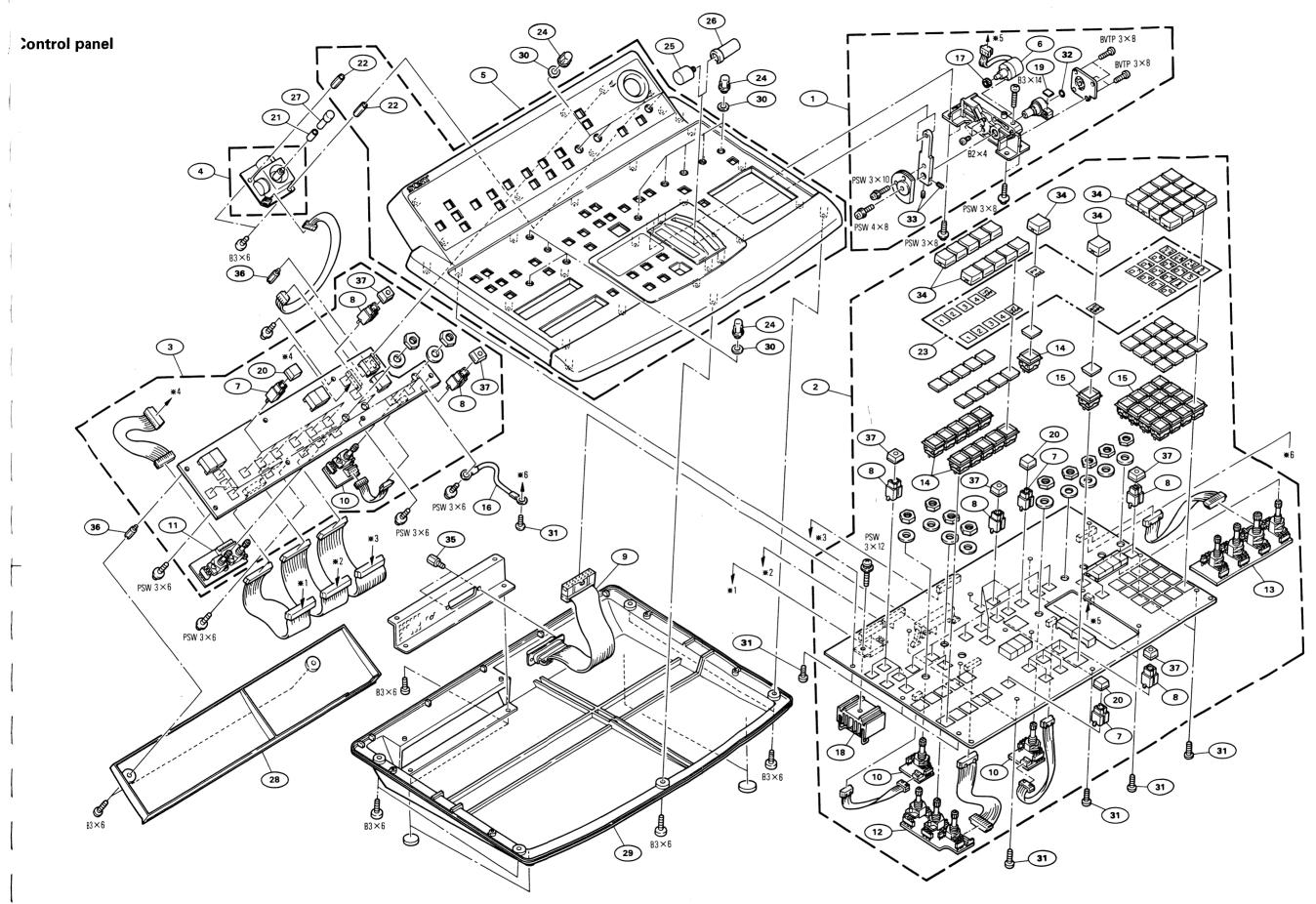
 $\text{Resistor} : \Omega$

8-2. EXPLODED VIEW AND LIST

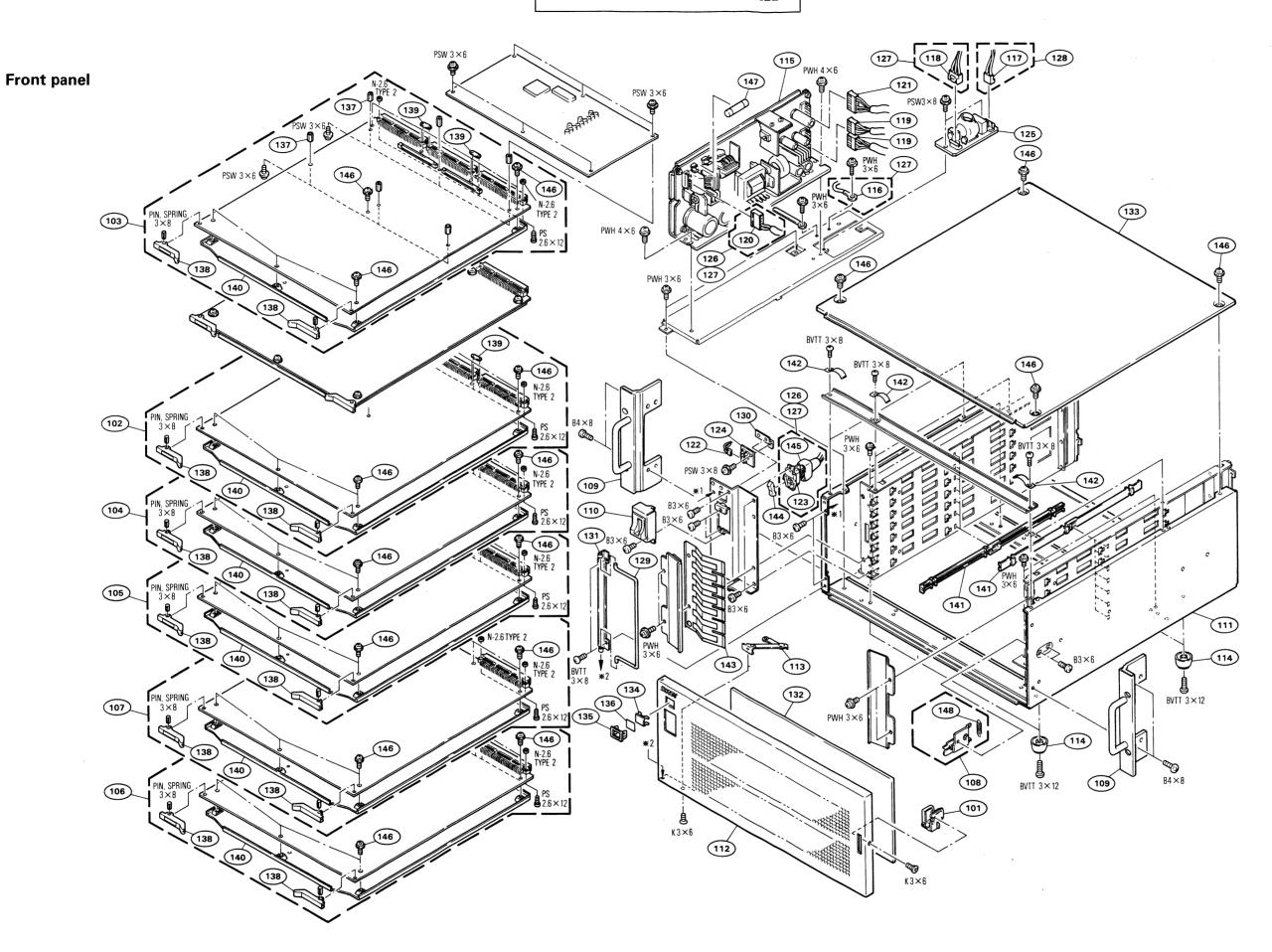
CONTROL PANEL, DFS-500/500P

```
SP Description
No.
                   Part No.
                    A-8262-836-A o FADER ASSY
                   A-8271-686-A O MOUNTED CIRCUIT BOARD, KY-223
A-8271-687-A O MOUNTED CIRCUIT BOARD, KY-225
A-8271-688-A O MOUNTED CIRCUIT BOARD, KY-226
                    X-3166-840-1 o PANEL ASSY, UPPER
                   1-466-182-11 s ENCODER, ROTARY (MAGNETIC)
1-571-653-21 s SWITCH, TACTIL
1-571-654-21 s SWITCH, TACTIL
1-574-992-11 s WIRE ASSY, FLAT TYPE(25 CORE)
1-644-610-11 o PRINTED CIRCUIT BOARD, VR-135
10
                   1-644-611-11 O PRINTED CIRCUIT BAORD, VR-136
1-644-612-11 O PRINTED CIRCUIT BOARD, VR-137
1-644-613-11 O PRINTED CIRCUIT BOARD, VR-138
1-692-347-11 s SWITCH, PUSH
1-692-348-11 s SWITCH, PUSH
 12
 13
 15
                    1-951-147-11 o HARNESS (KY-4)
2-139-100-01 s GEAR (C)
2-139-131-01 o HEAT SINK, CON.
2-139-171-01 s SPACER (F)
2-140-311-04 s KEY TOP
 16
17
 18
 19
  20
                    3-166-428-01 s COVER, JOG
3-168-210-01 o SPACER (A)
3-177-559-01 o CHIP (A), SW
3-178-147-02 s KNOB, VOLUME
3-178-149-01 o GRIP (A)
 22
23
  25
                    3-178-150-01 o GRIP (B)
3-178-151-01 s LEVER, JOG
3-178-173-01 o PANEL, REAR
3-178-178-01 o PANEL, LOWER
3-179-652-01 s WASHER
  27
  28
  29
30
                     3-678-079-01 s SCREW, +BVWH 3X8
3-701-443-21 s WASHER, POLY 5mm DIA., 0.5T
3-701-508-00 s SET SCREW, DOUBLE POINT 3X6
3-708-563-01 o CAP
  34
                     3-711-228-21 o STANDOFF, D SUB CONN.
  35
                     3\text{--}897\text{--}313\text{--}01 s BOSS (17.2), RELAY 4-928-315-01 s KEY TOP
```





DFS-500/500P



```
FRONT PANEL, DFS-500/500P
```

```
SP Description
No.
                        Part No.
                       A-8262-832-A O HANDLE ASSY, DOOR
A-8271-679-A O MOUNTED CIRCUIT BOARD, MY-54
A-8271-680-A O MOUNTED CIRCUIT BOARD, DA-63 (FOR J, UC)
A-8271-692-A O MOUNTED CIRCUIT BOARD, DA-63P (FOR EK)
A-8271-683-A O MOUNTED CIRCUIT BOARD, PU-78
A-8271-684-A O MOUNTED CIRCUIT BOARD, FM-29 (FOR J, UC)
A-8271-693-A O MOUNTED CIRCUIT BOARD, FM-29 (FOR EK)
 101
 102
 103
 104
 105
                        A-8271-685-A O MOUNTED CIRCUIT BOARD, AD-76 (FOR J, UC) A-8271-697-A O MOUNTED CIRCUIT BOARD, AD-76P (FOR EK) A-8271-694-A O MOUNTED CIRCUIT BOARD, SY-172 (FOR J) A-8271-695-A O MOUNTED CIRCUIT BOARD, SY-172 (FOR UC) A-8271-695-A O MOUNTED CIRCUIT BOARD, SY-172P (FOR EK) Y-2127-218-1 O LOCK ASSY DOOP
 106
 107
                         X-2127-216-1 0 LOCK ASSY, DOOR
X-2127-223-2 0 ANGLE ASSY (4U), RACK
X-2127-224-1 s BRACKET ASSY, SW
  109
  110
                  X-2127-225-3 O CHASSIS (4U) ASSY

X-3166-837-1 O PANEL ASSY, FRONT (FOr J, UC)

X-3166-876-1 O PANEL ASSY, FRONT (FOR EK)

X-3166-838-1 O STOPPER ASSY

X-3566-109-0 S FOOT ASSY, MF

⚠1-413-776-11 S SWITCHING REGULATOR (SSOG1213) (FOR J, UC)

⚠1-413-776-21 S SWITCHING REGULATOR (SSOG1213KA) (FOR EK)
   114
                  1-535-340-11 0 TERMINAL, SOLDERLESS

1-562-211-11 0 HOUSING, CONNECTOR 3P (FOR EK)

1-562-210-11 0 CONNECTOR, CONTACT

1-562-286-11 0 HOUSING, CONNECTOR 5P (FOR EK)

1-562-210-11 0 CONNECTOR, CONTACT

1-562-819-11 0 HOUSING, CONNECTOR 4P

1-560-764-21 0 TERMINAL, SOLDERLESS

1-562-820-11 0 HOUSING, CONNECTOR 5P

1-560-764-21 0 TERMINAL, SOLDERLESS
   117
   118
   119
                   1-562-821-11 O HOUSING, CONNECTOR 6P

↑1-560-764-21 O TERMINAL, SOLDERLESS
1-569-196-31 O HOUSING, CONNECTOR 3P
1-569-193-11 O TERMINAL, SOLDERLESS
↑1-570-117-41 S SWITCH, SEESAW (AC POWER)
1-620-338-11 O PC BOARD, LE-55
1-636-387-12 O PC BOARD, AC-111 (FOR EK)
    121
    122
    124
   2-139-127-01 s HINGE (4U)
     131
                            2-139-136-03 s FILTER (40)
2-139-153-01 o PLATE (D450), TOP
2-139-192-01 o FRAME, INDICATOR WINDOW
2-139-193-01 o WINDOW, INDICATOR
     132
     133
                            2-249-353-00 o COVER, LAMP
2-280-622-21 o SUPPORT (M3X10), HEXAGON
3-166-184-01 o LEVER, PC BOARD
3-166-185-01 s NUT, PLATE
3-178-157-01 o PLATE, SHIELD
     137
     138
      139
      140
                            3-178-164-01 o RAIL (290), PC BOARD GUIDE
3-178-672-01 o FINGER, SHIELD
3-179-322-01 o SPRING (L), GROUND
3-688-814-01 s CAP, SWITCH
4-378-341-01 o COVER, SWITCH
      141
      142
      143
      144
                      4-886-821-11 s SCREW, M3 CASE

A 9-903-804-01 s FUSE GGL10 250V10A (For J, UC)

A 9-903-806-01 s FUSE S506-6.3A COLOR (For EK)
      148
                              9-910-999-31 s SPRING, TENSION
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REAR PANEL, DFS-500/500P

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SP Description
                        Part No.
No.
                       A-8271-678-A O MOUNTED CIRCUIT BOARD, MB-385
A-8271-681-A O MOUNTED CIRCUIT BOARD, CN-573
 202
                       X-2068-004-0 s TERMINAL ASSY
1-535-316-11 s TERMINAL, GROUND (M4)
1-541-329-31 s FAN, DC (WITH ALARM)
 203
 204
 205
                 1-562-285-11 o HOUSING, CONNECTOR 4P

A1-562-210-11 o CONNECTOR, CONTACT

A1-562-286-11 o HOUSING, CONNECTOR 5P

A1-562-210-11 o CONNECTOR, CONTACT

1-563-337-11 s HOUSING, CONNECTOR (DIP) 96P

1-568-676-11 o CONNECTOR, D-SUB 9P

1-568-677-11 o CONNECTOR, D-SUB 25P
 206
 207
 208
209
                       1-569-196-11 O HOUSING, CONNECTOR 3P
1-569-193-11 O TERMINAL, SOLDERLESS
1-570-157-51 S SWITCH, SLIDE
1-573-580-11 S CONNECTOR, BNC (RECEPTACLE)
1-573-589-11 S CONNECTOR (R-M) 12P
1-573-590-12 S CONNECTOR, (S) TERMINAL 4P
 211
  213
  214
                 1-573-592-11 s CONNECTOR (R-F) 12P

↑1-580-375-11 s INLET 3P

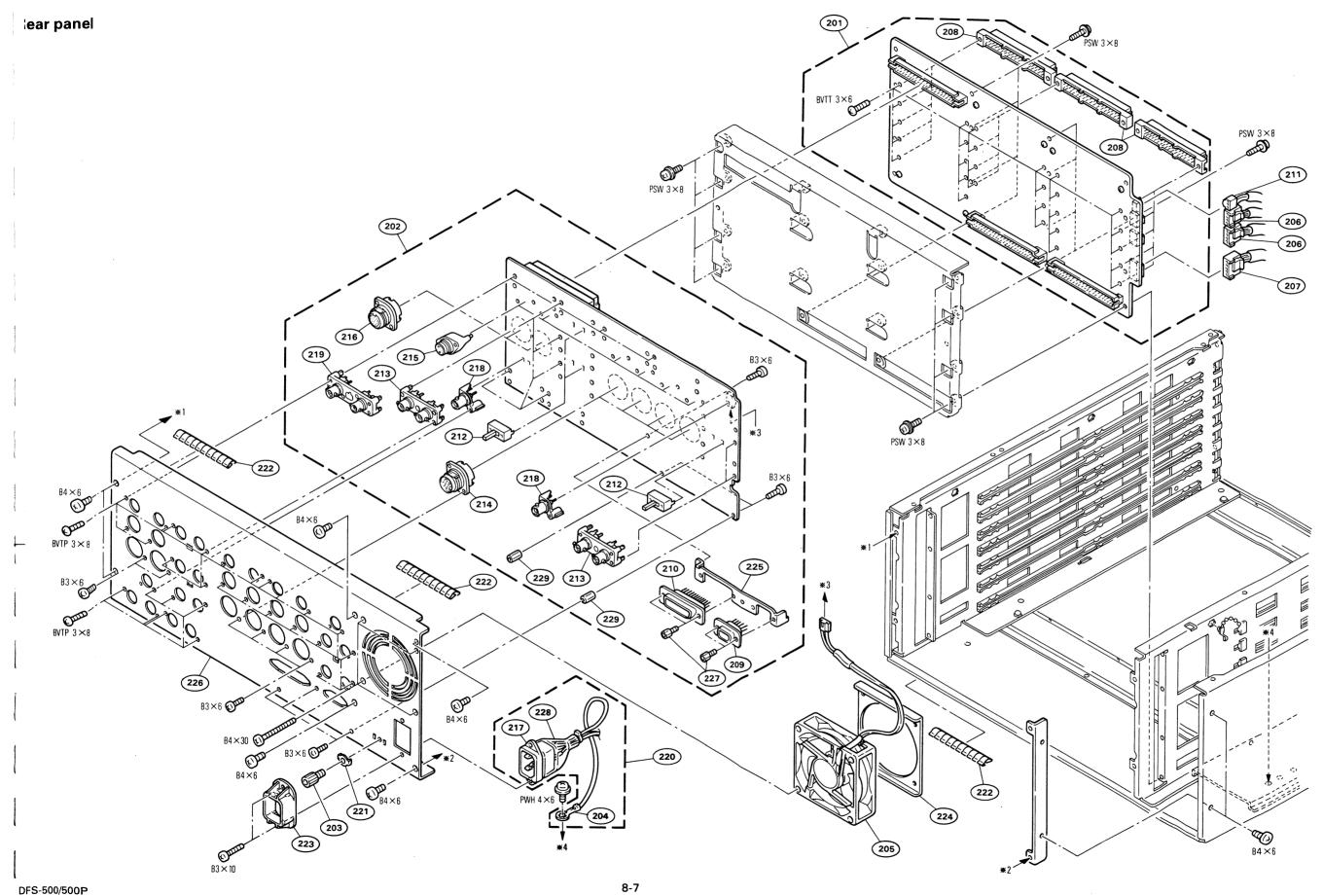
1-691-274-11 s CONNECTOR ASSY (BNC) 1P

1-695-807-11 s CONNECOTR, BNC (RECEPTACLE)

↑1-950-804-11 o HARNESS (ACW-500) (For J, UC)

↑1-950-975-11 o HARNESS (ACW-500PA) (For EK)
  217
  218
   219
                         2-068-008-00 s WASHER
2-139-222-01 o SPRING
2-990-241-02 s HOLDER (A), PLUG
3-178-136-01 o BRACKET, FAN
3-178-137-01 o BRACKET, D-SUB
   222
   223
   224
                         3-178-161-01 o PANEL, REAR
3-673-910-21 o SCREW, CONNECTOR
4-601-466-11 o COVER, 3P INLET
4-876-607-21 o COLLAR (E), PLATE, JACK
   227
   228
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8-3. ELECTRICAL PARTS LIST

CAPACITOR (CERAMIC)

Part No. SP Description

1-163-097-00 s CERAMIC, CHIP 15pF 5% 50V 1-163-038-00 s CERAMIC, CHIP 0.1 50V

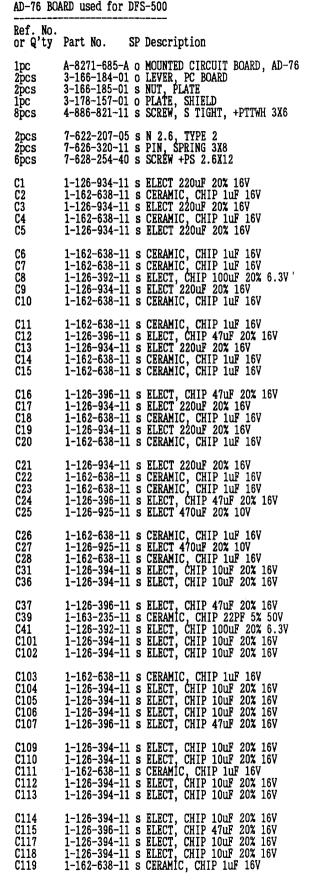
RESISTOR (METAL)

Part No.	SP Descri	ption		
1-216-624-1 1-216-627-1 1-216-631-1 1-216-651-1 1-216-659-1	1 s METAL, 1 s METAL, 1 s METAL,	CHIP	100 150 1.0k	1% 1/10W 1% 1/10W 1% 1/10W 1% 1/10W 1% 1/10W
1-216-667-1 1-216-675-1 1-216-699-1	1 s METAL,	CHIP	10k	1% 1/10W 1% 1/10W 1% 1/10W

AC-III BUAKU USEQ TOT DES-500P			
Ref. No. or Q'ty	Part No. SP Description		
1pc	1-636-387-12 o PRINTED CIRCUIT BOARD, AC-111		
C2 <u>7</u>	\1-136-185-00 s FILM 0.22uF 20% 250V \1-137-106-11 s FILM 0.022uF 20% 25V \1-162-573-11 s CERAMIC 100PF 10% 400V \1-162-573-11 s CERAMIC 100PF 10% 400V		
CN1 A	1-564-321-00 o CONNECTOR, VH 2P, MALE 1-564-687-11 o CONNECTOR, VH 3P, MALE		
11 <i>l</i> i	1-421-944-11 S TRANSFORMER, LINE FILTER		

1-214-937-00 s METAL 1M 1% 1/2W

AG 111 DOADD wood for DEC-500D





R1

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(AD-76 BOARD used for DFS-500)
(AD-76 BOARD used for DFS-500)
                                                                                                                                                                                                                               Ref. No. or Q'ty Part No.
Ref. No. or Q'ty Part No.
                                                                                                                                                                                                                                                                                                        SP Description
                                                                           SP Description
                               1-126-394-11 s ELECT, CHIP 10uF 20% 16V
1-126-394-11 s ELECT, CHIP 10uF 20% 16V
1-126-394-11 s ELECT, CHIP 10uF 20% 16V
1-126-396-11 s ELECT, CHIP 47uF 20% 16V
1-126-394-11 s ELECT, CHIP 10uF 20% 16V
                                                                                                                                                                                                                                                               1-126-396-11 s ELECT, CHIP 47uF 20% 16V
1-126-394-11 s ELECT, CHIP 10uF 20% 16V
1-126-394-11 s ELECT, CHIP 10uF 20% 16V
1-162-638-11 s CERAMIC, CHIP 1uF 16V
1-126-394-11 s ELECT, CHIP 10uF 20% 16V
                                                                                                                                                                                                                               C241
 C121
                                                                                                                                                                                                                               C242
 C122
                                                                                                                                                                                                                               C243
 C\bar{1}\bar{2}\bar{3}
                                                                                                                                                                                                                               C244
 C125
                                                                                                                                                                                                                                                               1-126-394-11 s ELECT, CHIP 10uF 20% 16V
1-126-394-11 s ELECT, CHIP 10uF 20% 16V
1-126-396-11 s ELECT, CHIP 47uF 20% 16V
1-163-222-11 s CERAMIC, CHIP 5PF 50V
1-163-222-11 s CERAMIC, CHIP 5PF 50V
                                 1-126-394-11 s ELECT, CHIP 10uF 20% 16V
                                1-126-394-11 S ELECT, CHIP 10UF 202 16V

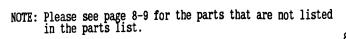
1-162-638-11 S CERAMIC, CHIP 10UF 16V

1-126-394-11 S ELECT, CHIP 10UF 202 16V

1-126-394-11 S ELECT, CHIP 10UF 202 16V

1-126-394-11 S ELECT, CHIP 10UF 202 16V
                                                                                                                                                                                                                               C246
C247
 C127
 C128
                                                                                                                                                                                                                                C301
 C129
                                                                                                                                                                                                                               C302
 C130
                                                                                                                                                                                                                                                               1-126-394-11 s ELECT, CHIP 10uF 20% 16V
1-126-396-11 s ELECT, CHIP 47uF 20% 16V
1-162-638-11 s CERAMIC, CHIP 1uF 16V
1-126-396-11 s ELECT, CHIP 47uF 20% 16V
1-126-392-11 s ELECT, CHIP 100uF 20% 6.3V
                                 1-126-396-11 s ELECT, CHIP 47uF 20% 16V
1-126-394-11 s ELECT, CHIP 10uF 20% 16V
1-126-394-11 s ELECT, CHIP 10uF 20% 16V
1-162-638-11 s CERAMIC, CHIP 1uF 16V
1-126-394-11 s ELECT, CHIP 10uF 20% 16V
                                                                                                                                                                                                                                C305
                                                                                                                                                                                                                                C306
 C133
C134
C135
C136
                                                                                                                                                                                                                                C307
                                                                                                                                                                                                                                 C309
                                                                                                                                                                                                                                C310
                                                                                                                                                                                                                                                               1-126-392-11 s ELECT, CHIP 100uF 20% 6.3V 1-126-392-11 s ELECT, CHIP 100uF 20% 6.3V 1-162-638-11 s CERAMIC, CHIP 1uF 16V 1-163-133-00 s CERAMIC, CHIP 470PF 5% 50V 1-126-394-11 s ELECT, CHIP 10uF 20% 16V
                                 1-126-394-11 s ELECT, CHIP 10uF 20% 16V
1-126-394-11 s ELECT, CHIP 10uF 20% 16V
1-126-396-11 s ELECT, CHIP 47uF 20% 16V
1-126-394-11 s ELECT, CHIP 10uF 20% 16V
1-126-394-11 s ELECT, CHIP 10uF 20% 16V
                                                                                                                                                                                                                                 C311
  C137
                                                                                                                                                                                                                                 C312
   C138
                                                                                                                                                                                                                                 C313
C318
   C139
   C141
                                                                                                                                                                                                                                 C319
   C142
                                                                                                                                                                                                                                                                1-126-392-11 s ELECT, CHIP 100uF 20% 6.3V 1-163-224-11 s CERAMIC 7PF 0.25PF 50V 1-126-394-11 s ELECT, CHIP 10uF 20% 16V 1-126-394-11 s ELECT, CHIP 10uF 20% 16V 1-126-394-11 s ELECT, CHIP 10uF 20% 16V
                                  1-162-638-11 s CERAMIC, CHIP 1uF 16V
1-126-394-11 s ELECT, CHIP 10uF 20% 16V
1-126-394-11 s ELECT, CHIP 10uF 20% 16V
1-126-394-11 s ELECT, CHIP 10uF 20% 16V
1-126-396-11 s ELECT, CHIP 47uF 20% 16V
                                                                                                                                                                                                                                 C321
                                                                                                                                                                                                                                C332
C341
C342
   C144
   C145
   C146
                                                                                                                                                                                                                                 C343
   C147
                                                                                                                                                                                                                                                               1-126-394-11 s ELECT, CHIP 10uF 20% 16V
1-126-396-11 s ELECT, CHIP 47uF 20% 16V
1-163-251-11 s CERAMIC, CHIP 100PF 5% 50V
1-163-251-11 s CERAMIC, CHIP 100PF 5% 50V
1-126-392-11 s ELECT, CHIP 100UF 20% 6.3V
                                  1-126-394-11 s ELECT, CHIP 10uF 20% 16V
1-126-394-11 s ELECT, CHIP 10uF 20% 16V
1-162-638-11 s CERAMIC, CHIP 1uF 16V
1-126-394-11 s ELECT, CHIP 10uF 20% 16V
1-126-394-11 s ELECT, CHIP 10uF 20% 16V
                                                                                                                                                                                                                                 C344
   C201
                                                                                                                                                                                                                                 C347
C352
   C202
   C203
C204
                                                                                                                                                                                                                                  C353
   C205
                                   1-126-394-11 s ELECT, CHIP 10uF 20% 16V
1-126-396-11 s ELECT, CHIP 47uF 20% 16V
1-126-394-11 s ELECT, CHIP 10uF 20% 16V
1-126-394-11 s ELECT, CHIP 10uF 20% 16V
1-162-638-11 s CERAMIC, CHIP 1uF 16V
                                                                                                                                                                                                                                                                1-164-232-11 s CERAMIC 0.01uF 10% 100V
1-126-394-11 s ELECT, CHIP 10uF 20% 16V
1-163-035-00 s CERAMIC, CHIP 0.047uF 50V
1-162-638-11 s CERAMIC, CHIP 1uF 16V
1-126-392-11 s ELECT, CHIP 100uF 20% 6.3V
    C206
                                                                                                                                                                                                                                 C361
C363
   C207
C209
                                                                                                                                                                                                                                 C366
    C210
                                                                                                                                                                                                                                 C367
    C211
                                    1-126-394-11 s ELECT, CHIP 10uF 20% 16V
1-126-394-11 s ELECT, CHIP 10uF 20% 16V
1-126-394-11 s ELECT, CHIP 10uF 20% 16V
1-126-396-11 s ELECT, CHIP 47uF 20% 16V
1-126-394-11 s ELECT, CHIP 10uF 20% 16V
                                                                                                                                                                                                                                                                1-164-232-11 s CERAMIC 0.01uF 10% 100V
1-164-232-11 s CERAMIC 0.01uF 10% 100V
1-163-251-11 s CERAMIC, CHIP 100PF 5% 50V
1-163-251-11 s CERAMIC, CHIP 100PF 5% 50V
1-163-239-11 s CERAMIC, CHIP 33PF 5% 50V
                                                                                                                                                                                                                                  C370
    C212
                                                                                                                                                                                                                                 C371
    C213
                                                                                                                                                                                                                                 C382
C383
    C214
C215
                                                                                                                                                                                                                                 C385
    C217
                                    1-126-394-11 s ELECT, CHIP 10uF 20% 16V
1-162-638-11 s CERAMIC, CHIP 1uF 16V
1-126-394-11 s ELECT, CHIP 10uF 20% 16V
1-126-394-11 s ELECT, CHIP 10uF 20% 16V
1-126-394-11 s ELECT, CHIP 10uF 20% 16V
                                                                                                                                                                                                                                                                1-163-239-11 s CERAMIC, CHIP 33PF 5% 50V
1-163-239-11 s CERAMIC, CHIP 33PF 5% 50V
1-163-121-00 s CERAMIC, CHIP 150PF 5% 50V
1-163-222-11 s CERAMIC, CHIP 5PF 50V
1-163-222-11 s CERAMIC, CHIP 5PF 50V
                                                                                                                                                                                                                                  C386
     C218
                                                                                                                                                                                                                                 C387
   C219
C220
C221
                                                                                                                                                                                                                                 C388
C401
                                                                                                                                                                                                                                 C402
     C222
                                    1-126-396-11 s ELECT, CHIP 47uF 20% 16V
1-126-394-11 s ELECT, CHIP 10uF 20% 16V
1-126-394-11 s ELECT, CHIP 10uF 20% 16V
1-162-638-11 s CERAMIC, CHIP 1uF 16V
1-126-394-11 s ELECT, CHIP 10uF 20% 16V
                                                                                                                                                                                                                                                                1-126-394-11 s ELECT, CHIP 10uF 20% 16V
1-126-396-11 s ELECT, CHIP 47uF 20% 16V
1-162-638-11 s CERAMIC, CHIP 1uF 16V
1-126-396-11 s ELECT, CHIP 47uF 20% 16V
1-126-392-11 s ELECT, CHIP 100uF 20% 6.3V
                                                                                                                                                                                                                                  C405
                                                                                                                                                                                                                                 C406
    C225
C226
C227
                                                                                                                                                                                                                                 C407
C409
                                                                                                                                                                                                                                 C410
     C228
                                                                                                                                                                                                                                                                1-126-392-11 s ELECT, CHIP 100uF 20% 6.3V 1-126-392-11 s ELECT, CHIP 100uF 20% 6.3V 1-162-638-11 s CERAMIC, CHIP 1uF 16V 1-163-133-00 s CERAMIC, CHIP 470PF 5% 50V 1-126-394-11 s ELECT, CHIP 10uF 20% 16V
                                    1-126-394-11 s ELECT, CHIP 10uF 20% 16V
1-126-394-11 s ELECT, CHIP 10uF 20% 16V
1-126-396-11 s ELECT, CHIP 47uF 20% 16V
1-126-394-11 s ELECT, CHIP 10uF 20% 16V
1-126-394-11 s ELECT, CHIP 10uF 20% 16V
    C229
C230
                                                                                                                                                                                                                                 C412
C413
    C231
C233
                                                                                                                                                                                                                                 C418
C419
     C234
                                                                                                                                                                                                                                                               1-126-392-11 s ELECT, CHIP 100uF 20% 6.3V
1-163-224-11 s CERAMIC 7PF 0.25PF 50V
1-126-394-11 s ELECT, CHIP 10uF 20% 16V
1-126-394-11 s ELECT, CHIP 10uF 20% 16V
                                     1-162-638-11 s CERAMIC, CHIP 1UF 16V
1-126-394-11 s ELECT, CHIP 10UF 20% 16V
1-126-394-11 s ELECT, CHIP 10UF 20% 16V
1-126-394-11 s ELECT, CHIP 10UF 20% 16V
    C236
C237
                                                                                                                                                                                                                                 C432
                                                                                                                                                                                                                                 C441
```

(AD-76 BOARD used for DFS-500)		(AD-76 BOARD used for DFS-500)		
Ref No	urt No. SP		Ref. No. or Q'ty	Part No. SP Description
		ELECT, CHIP 10uF 20% 16V ELECT, CHIP 10uF 20% 16V ELECT, CHIP 47uF 20% 16V CERAMIC, CHIP 100PF 5% 50V CERAMIC, CHIP 100PF 5% 50V	C593 C594 C595 C601 C602	1-126-394-11 s ELECT, CHIP 10uF 20% 16V 1-163-239-11 s CERAMIC, CHIP 33PF 5% 50V 1-126-392-11 s ELECT, CHIP 100uF 20% 6.3V 1-126-394-11 s ELECT, CHIP 10uF 20% 16V 1-126-394-11 s ELECT, CHIP 10uF 20% 16V
C455 1- C459 1- C461 1- C463 1- C466 1-	-126-392-11 s -164-232-11 s -126-394-11 s -163-035-00 s -162-638-11 s	ELECT, CHIP 100uF 20% 6.3V CERAMIC 0.01uF 10% 100V ELECT, CHIP 10uF 20% 16V CERAMIC, CHIP 0.047uF 50V CERAMIC, CHIP 1uF 16V	C607 C608 C610 C621 C625	1-162-638-11 s CERAMIC, CHIP 1uF 16V 1-162-638-11 s CERAMIC, CHIP 1uF 16V 1-126-396-11 s ELECT, CHIP 47uF 20% 16V 1-126-392-11 s ELECT, CHIP 100uF 20% 6.3V 1-162-638-11 s CERAMIC, CHIP 1uF 16V
C467 1- C470 1- C471 1- C482 1- C483 1-	-126-392-11 s -164-232-11 s -164-232-11 s -163-251-11 s -163-251-11 s	ELECT, CHIP 100UF 20% 6.3V CERAMIC 0.01UF 10% 100V CERAMIC 0.01UF 10% 100V CERAMIC, CHIP 100PF 5% 50V CERAMIC, CHIP 100PF 5% 50V	C626 C627 C628 C629 C630	1-164-005-11 s CERAMIC, CHIP 0.47uF 25V 1-162-638-11 s CERAMIC, CHIP 1uF 16V 1-163-035-00 s CERAMIC, CHIP 0.047uF 50V 1-163-035-00 s CERAMIC, CHIP 0.047uF 50V 1-162-638-11 s CERAMIC, CHIP 1uF 16V
C485 1- C486 1- C487 1- C488 1- C501 1-	-163-239-11 s -163-239-11 s -163-239-11 s -163-121-00 s -126-394-11 s	CERAMIC, CHIP 33PF 5% 50V CERAMIC, CHIP 33PF 5% 50V CERAMIC, CHIP 33PF 5% 50V CERAMIC, CHIP 150PF 5% 50V ELECT, CHIP 10UF 20% 16V	C631 C634 C636 C637 C639	1-126-392-11 s ELECT, CHIP 100uF 20% 6.3V 1-126-396-11 s ELECT, CHIP 47uF 20% 16V 1-163-251-11 s CERAMIC, CHIP 100PF 5% 50V 1-163-275-11 s CERAMIC, CHIP 0.001uF 5% 50V 1-163-235-11 s CERAMIC, CHIP 22PF 5% 50V
C502 1- C507 1- C508 1- C510 1- C521 1-	-126-394-11 s -162-638-11 s -162-638-11 s -126-396-11 s -126-392-11 s	ELECT, CHIP 10UF 20% 16V CERAMIC, CHIP 1UF 16V CERAMIC, CHIP 1UF 16V ELECT, CHIP 47UF 20% 16V ELECT, CHIP 100UF 20% 6.3V	C640 C641 C642 C643 C644	1-163-275-11 s CERAMIC, CHIP 0.001uF 5% 50V 1-164-232-11 s CERAMIC 0.01uF 10% 100V 1-126-398-11 s ELECT, CHIP 4.7uF 20% 35V 1-163-229-11 s CERAMIC, CHIP 12PF 5% 50V 1-163-275-11 s CERAMIC, CHIP 0.001uF 5% 50V
C525 1- C526 1- C527 1- C528 1- C529 1-	-162-638-11 s -164-005-11 s -162-638-11 s -163-035-00 s -163-035-00 s	G CERAMIC, CHIP 1uF 16V G CERAMIC, CHIP 0.47uF 25V G CERAMIC, CHIP 1uF 16V G CERAMIC, CHIP 0.047uF 50V G CERAMIC, CHIP 0.047uF 50V	C645 C646 C647 C648 C660	1-163-275-11 s CERAMIC, CHIP 0.001uF 5% 50V 1-163-275-11 s CERAMIC, CHIP 0.001uF 5% 50V 1-163-227-11 s CERAMIC, CHIP 10PF 5% 50V 1-126-394-11 s ELECT, CHIP 10uF 20% 16V 1-126-392-11 s ELECT, CHIP 100uF 20% 6.3V
C530 1- C531 1- C534 1- C536 1- C537 1-	-162-638-11 s -126-392-11 s -126-396-11 s -163-251-11 s -163-275-11 s	CERAMIC, CHIP 1UF 16V ELECT, CHIP 100UF 20% 6.3V ELECT, CHIP 47UF 20% 16V CERAMIC, CHIP 100PF 5% 50V CERAMIC, CHIP 0.001UF 5% 50V	C662 C663 C665 C666 C672	1-164-232-11 s CERAMIC 0.01uF 10% 100V 1-126-398-11 s ELECT, CHIP 4.7uF 20% 35V 1-164-232-11 s CERAMIC 0.01uF 10% 100V 1-126-392-11 s ELECT, CHIP 100uF 20% 6.3V 1-163-241-11 s CERAMIC, CHIP 39PF 5% 50V
C541 1- C542 1-	-164-232-11 s -126-398-11 s	S CERAMIC, CHIP 22PF 5% 50V S CERAMIC, CHIP 0.001uF 5% 50V S CERAMIC 0.01uF 10% 100V S ELECT, CHIP 4.7uF 20% 35V S CERAMIC, CHIP 12PF 5% 50V	C676 C685 C686 C687 C688	1-163-241-11 s CERAMIC, CHIP 39PF 5% 50V 1-163-239-11 s CERAMIC, CHIP 33PF 5% 50V
C545 1: C546 1: C547 1:	-163-275-11	S CERAMIC, CHIP 0.001uF 5% 50V S CERAMIC, CHIP 0.001uF 5% 50V S CERAMIC, CHIP 0.001uF 5% 50V S CERAMIC, CHIP 10PF 5% 50V S ELECT, CHIP 10uF 20% 16V	C689 C690 C692 C693 C694	1-163-239-11 s CERAMIC, CHIP 33PF 5% 50V 1-163-121-00 s CERAMIC, CHIP 150PF 5% 50V 1-163-251-11 s CERAMIC, CHIP 100PF 5% 50V 1-126-394-11 s ELECT, CHIP 10uF 20% 16V 1-163-239-11 s CERAMIC, CHIP 33PF 5% 50V
C562 1 C563 1 C565 1	-164-232-11	S ELECT, CHIP 100UF 20% 6.3V S CERAMIC 0.01UF 10% 100V S ELECT, CHIP 4.7UF 20% 35V S CERAMIC 0.01UF 10% 100V S ELECT, CHIP 100UF 20% 6.3V	C695 C701 C702 C703 C704	1-126-392-11 s ELECT, CHIP 100uF 20% 6.3V 1-162-638-11 s CERAMIC, CHIP 1uF 16V 1-126-396-11 s ELECT, CHIP 47uF 20% 16V 1-126-396-11 s ELECT, CHIP 47uF 20% 16V 1-163-087-00 s CERAMIC, CHIP 4PF 50V
C576 1 C585 1 C586 1	-163-241-11	S CERAMIC, CHIP 39PF 5% 50V S CERAMIC, CHIP 39PF 5% 50V S CERAMIC, CHIP 33PF 5% 50V S CERAMIC, CHIP 33PF 5% 50V S CERAMIC, CHIP 33PF 5% 50V	C720 C740 C751 C752 C753	1-163-235-11 s CERAMIC, CHIP 22PF 5% 50V 1-163-235-11 s CERAMIC, CHIP 22PF 5% 50V 1-104-601-21 s ELECT 10uF 20% 10V 1-104-601-21 s ELECT 10uF 20% 10V 1-126-396-11 s ELECT, CHIP 47uF 20% 16V
C589 1 C590 1	-163-239-11	S CERAMIC, CHIP 33PF 5% 50V S CERAMIC, CHIP 33PF 5% 50V S CERAMIC, CHIP 150PF 5% 50V S CERAMIC, CHIP 100PF 5% 50V	C756 C757 C759 C760	1-126-394-11 s ELECT, CHIP 10uF 20% 16V 1-126-396-11 s ELECT, CHIP 47uF 20% 16V 1-126-392-11 s ELECT, CHIP 100uF 20% 6.3V 1-162-638-11 s CERAMIC, CHIP 1uF 16V





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(AD-76 BOARD used for DFS-500)
(AD-76 BOARD used for DFS-500)
                                                                                                                                                                                                     Ref. No. or Q'ty Part No. SP Description
Ref. No. or Q'ty Part No.
                                                          SP Description
                            1-126-392-11 s ELECT, CHIP 100uF 20% 6.3V
1-162-638-11 s CERAMIC, CHIP 1uF 16V
1-162-638-11 s CERAMIC, CHIP 1uF 16V
1-104-601-21 s ELECT 10uF 20% 10V
1-104-601-21 s ELECT 10uF 20% 10V
                                                                                                                                                                                                                                  1-126-392-11 s ELECT, CHIP 100uF 20% 6.3V 1-163-251-11 s CERAMIC, CHIP 100PF 5% 50V 1-163-275-11 s CERAMIC, CHIP 0.001uF 5% 50V 1-163-251-11 s CERAMIC, CHIP 100PF 5% 50V 1-163-251-11 s CERAMIC, CHIP 100PF 5% 50V
                                                                                                                                                                                                      C911
C763
                                                                                                                                                                                                      C915
C764
                                                                                                                                                                                                      C916
C765
                                                                                                                                                                                                      C918
C766
                                                                                                                                                                                                      C919
                                                                                                                                                                                                                                  1-164-004-11 s CERAMIC, CHIP 0.1uF 10% 25V
1-126-392-11 s ELECT, CHIP 100uF 20% 6.3V
1-163-275-11 s CERAMIC, CHIP 0.001uF 5% 50V
1-163-227-11 s CERAMIC, CHIP 10PF 5% 50V
1-163-235-11 s CERAMIC, CHIP 22PF 5% 50V
                            1-126-394-11 s ELECT, CHIP 10uF 20% 16V
1-126-396-11 s ELECT, CHIP 47uF 20% 16V
1-126-392-11 s ELECT, CHIP 100uF 20% 6.3V
1-162-638-11 s CERAMIC, CHIP 1uF 16V
1-126-392-11 s ELECT, CHIP 100uF 20% 6.3V
                                                                                                                                                                                                      C922
                                                                                                                                                                                                      C923
C771
C773
C774
                                                                                                                                                                                                      C927
                                                                                                                                                                                                      C930
                            1-162-638-11 s CERAMIC, CHIP 1uF 16V
1-162-638-11 s CERAMIC, CHIP 1uF 16V
1-104-601-21 s ELECT 10uF 20% 10V
1-104-601-21 s ELECT 10uF 20% 10V
1-126-394-11 s ELECT, CHIP 10uF 20% 16V
                                                                                                                                                                                                                                  1-164-004-11 s CERAMIC, CHIP 0.1uF 10% 25V
1-164-004-11 s CERAMIC, CHIP 0.1uF 10% 25V
1-163-251-11 s CERAMIC, CHIP 100PF 5% 50V
1-126-396-11 s ELECT, CHIP 47uF 20% 16V
1-163-137-00 s CERAMIC, CHIP 680PF 5% 50V
                                                                                                                                                                                                      C944
 C778
 C779
C786
                                                                                                                                                                                                      C945
                                                                                                                                                                                                      C946
                                                                                                                                                                                                      C952
  C787
                                                                                                                                                                                                      C953
                              1-126-396-11 s ELECT, CHIP 47uF 20% 16V
1-126-392-11 s ELECT, CHIP 100uF 20% 6.3V
1-162-638-11 s CERAMIC, CHIP 1uF 16V
1-126-392-11 s ELECT, CHIP 100uF 20% 6.3V
1-162-638-11 s CERAMIC, CHIP 1uF 16V
                                                                                                                                                                                                                                  1-164-232-11 s CERAMIC 0.01uF 10% 100V
1-126-396-11 s ELECT, CHIP 47uF 20% 16V
1-126-394-11 s ELECT, CHIP 10uF 20% 16V
1-164-005-11 s CERAMIC, CHIP 0.47uF 25V
1-164-232-11 s CERAMIC 0.01uF 10% 100V
                                                                                                                                                                                                      C954
  C791
                                                                                                                                                                                                      C955
  C793
                                                                                                                                                                                                      C956
  C794
                                                                                                                                                                                                      C957
  C797
                                                                                                                                                                                                      C958
  C798
                                                                                                                                                                                                                                  1-163-133-00 s CERAMIC, CHIP 470PF 5% 50V
1-163-224-11 s CERAMIC 7PF 0.25PF 50V
1-164-232-11 s CERAMIC 0.01uF 10% 100V
1-163-275-11 s CERAMIC, CHIP 0.001uF 5% 50V
1-163-239-11 s CERAMIC, CHIP 33PF 5% 50V
                              1-162-638-11 s CERAMIC, CHIP 1uF 16V
1-162-638-11 s CERAMIC, CHIP 1uF 16V
1-126-396-11 s ELECT, CHIP 47uF 20% 16V
1-126-396-11 s ELECT, CHIP 47uF 20% 16V
1-163-087-00 s CERAMIC, CHIP 4PF 50V
  C799
                                                                                                                                                                                                      C962
  C801
                                                                                                                                                                                                       C963
  C802
                                                                                                                                                                                                        C965
  C803
                                                                                                                                                                                                        C968
   C804
                               1-163-235-11 s CERAMIC, CHIP 22PF 5% 50V

1-163-235-11 s CERAMIC, CHIP 22PF 5% 50V

1-104-601-21 s ELECT 10uF 20% 10V

1-104-601-21 s ELECT 10uF 20% 10V

1-126-396-11 s ELECT, CHIP 47uF 20% 16V
                                                                                                                                                                                                                                   1-162-638-11 s CERAMIC, CHIP 1uF 16V
1-126-394-11 s ELECT, CHIP 10uF 20% 16V
1-163-251-11 s CERAMIC, CHIP 100PF 5% 50V
1-163-251-11 s CERAMIC, CHIP 100PF 5% 50V
1-126-392-11 s ELECT, CHIP 100UF 20% 6.3V
                                                                                                                                                                                                        C1001
  C820
                                                                                                                                                                                                        C1002
  C840
                                                                                                                                                                                                        C1008
C1009
  C851
   C852
                                                                                                                                                                                                        C1011
   C853
                               1-126-394-11 s ELECT, CHIP 10uF 20% 16V
1-126-396-11 s ELECT, CHIP 47uF 20% 16V
1-126-392-11 s ELECT, CHIP 100uF 20% 6.3V
1-162-638-11 s CERAMIC, CHIP 1uF 16V
1-126-392-11 s ELECT, CHIP 100uF 20% 6.3V
                                                                                                                                                                                                                                   1-163-251-11 s CERAMIC, CHIP 100PF 5% 50V

1-163-275-11 s CERAMIC, CHIP 0.001uF 5% 50V

1-163-251-11 s CERAMIC, CHIP 100PF 5% 50V

1-163-251-11 s CERAMIC, CHIP 100PF 5% 50V

1-164-004-11 s CERAMIC, CHIP 0.1uF 10% 25V
   C856
                                                                                                                                                                                                        C1016
   C857
                                                                                                                                                                                                        C1018
   C859
                                                                                                                                                                                                        C1019
   C860
                                                                                                                                                                                                        C1022
   C863
                                                                                                                                                                                                                                   1-126-392-11 s ELECT, CHIP 100uF 20% 6.3V
1-163-275-11 s CERAMIC, CHIP 0.001uF 5% 50V
1-163-227-11 s CERAMIC, CHIP 10PF 5% 50V
1-163-235-11 s CERAMIC, CHIP 22PF 5% 50V
1-164-004-11 s CERAMIC, CHIP 0.1uF 10% 25V
                                1-162-638-11 s CERAMIC, CHIP 1uF 16V
1-162-638-11 s CERAMIC, CHIP 1uF 16V
1-104-601-21 s ELECT 10uF 20% 10V
1-104-601-21 s ELECT 10uF 20% 10V
1-126-394-11 s ELECT, CHIP 10uF 20% 16V
                                                                                                                                                                                                        C1023
   C864
                                                                                                                                                                                                        C1027
   C865
                                                                                                                                                                                                        C1030
   C866
                                                                                                                                                                                                        C1039
   C867
                                                                                                                                                                                                        C1044
   C870
                                                                                                                                                                                                                                   1-164-004-11 s CERAMIC, CHIP 0.1uF 10% 25V
1-163-275-11 s CERAMIC, CHIP 0.001uF 5% 50V
1-126-396-11 s ELECT, CHIP 47uF 20% 16V
1-163-137-00 s CERAMIC, CHIP 680PF 5% 50V
1-164-232-11 s CERAMIC 0.01uF 10% 100V
                                1-126-396-11 s ELECT, CHIP 47uF 20% 16V
1-126-392-11 s ELECT, CHIP 100uF 20% 6.3V
1-162-638-11 s CERAMIC, CHIP 1uF 16V
1-126-392-11 s ELECT, CHIP 100uF 20% 6.3V
1-162-638-11 s CERAMIC, CHIP 1uF 16V
                                                                                                                                                                                                        C1045
                                                                                                                                                                                                        C1046
   C873
                                                                                                                                                                                                        C1052
   C874
                                                                                                                                                                                                         C1053
   C877
                                                                                                                                                                                                         C1054
   C878
                                                                                                                                                                                                                                   1-126-396-11 s ELECT, CHIP 47uF 20% 16V
1-126-394-11 s ELECT, CHIP 10uF 20% 16V
1-164-005-11 s CERAMIC, CHIP 0.47uF 25V
1-164-232-11 s CERAMIC 0.01uF 10% 100V
1-163-133-00 s CERAMIC, CHIP 470PF 5% 50V
                                1-162-638-11 s CERAMIC, CHIP 1uF 16V

1-104-601-21 s ELECT 10uF 20% 10V

1-104-601-21 s ELECT 10uF 20% 10V

1-126-394-11 s ELECT, CHIP 10uF 20% 16V

1-126-396-11 s ELECT, CHIP 47uF 20% 16V
                                                                                                                                                                                                        C1055
   C879
                                                                                                                                                                                                        C1056
   C886
                                                                                                                                                                                                        C1057
   C887
                                                                                                                                                                                                         C1058
   C890
                                                                                                                                                                                                        C1061
    C891
                                                                                                                                                                                                                                   1-163-224-11 s CERAMIC 7PF 0.25PF 50V
1-164-232-11 s CERAMIC 0.01uF 10% 100V
1-163-275-11 s CERAMIC, CHIP 0.001uF 5% 50V
1-163-239-11 s CERAMIC, CHIP 33PF 5% 50V
                                1-126-392-11 s ELECT, CHIP 100uF 20% 6.3V

1-162-638-11 s CERAMIC, CHIP 1uF 16V

1-126-392-11 s ELECT, CHIP 100uF 20% 6.3V

1-162-638-11 s CERAMIC, CHIP 1uF 16V

1-162-638-11 s CERAMIC, CHIP 1uF 16V
                                                                                                                                                                                                        C1062
    C893
                                                                                                                                                                                                        C1063
    C894
                                                                                                                                                                                                        C1065
     C897
                                                                                                                                                                                                        C1068
     C898
    C899
                                                                                                                                                                                                                                   1-506-748-11 0 CONNECTOR, DIN 96P, MALE
1-506-748-11 0 CONNECTOR, DIN 96P, MALE
1-506-748-11 0 CONNECTOR, DIN 96P, MALE
                                                                                                                                                                                                        CN19
                                1-162-638-11 s CERAMIC, CHIP 1uF 16V
1-126-394-11 s ELECT, CHIP 10uF 20% 16V
1-163-251-11 s CERAMIC, CHIP 100PF 5% 50V
1-163-251-11 s CERAMIC, CHIP 100PF 5% 50V
                                                                                                                                                                                                        CN20
    C901
                                                                                                                                                                                                        CN21
    C902
    C908
                                                                                                                                                                                                        CV101
                                                                                                                                                                                                                                   1-141-229-00 s CAP, TRIMMER 7PF
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(AD-76 BOARD used for DFS-500) (AD-76 BOARD used for DFS-500) Ref. No. or Q'ty Part No. Ref. No. or Q'ty Part No. SP Description SP Description 8-759-710-62 s IC NJM2246M 8-759-710-29 s IC NJM2235M 8-759-710-62 s IC NJM2246M 8-759-710-07 s IC NJM2234M 1-141-229-00 s CAP, TRIMMER 7PF IC102 CV201 IC103 8-719-104-34 s DIODE 1S2835 8-719-104-34 s DIODE 1S2835 8-719-104-34 s DIODE 1S2835 8-719-104-34 s DIODE 1S2835 IC104 D101 IC105 D102 IC106 8-759-711-32 s IC NJM2245M D103 D106 8-759-710-29 s IC NJM2235M 8-759-710-62 s IC NJM2246M 8-759-710-07 s IC NJM2234M 8-759-711-32 s IC NJM2234M 8-759-710-07 s IC NJM2234M IC107 8-719-104-34 s DIODE 1S2835 D107 IC108 8-719-104-34 s DIODE 1S2835 IC109 IC110 D111 D112 IC111 D113 D121 8-759-711-32 s IC NJM2245M 8-759-925-74 s IC TC74HC04NS 8-759-926-99 s IC SN74HC4075NS 8-759-926-99 s IC SN74HC4075NS 8-759-925-85 s IC SN74HC32NS IC112 D122 IC113 IC114 8-719-105-57 s DIODE RD3.9M-B1 D123 8-719-157-23 s DIODE RD4.7M-B IC115 D124 8-719-915-43 s DIODE, VARICAP FC54M 8-719-915-43 s DIODE, VARICAP FC54M 8-719-104-34 s DIODE 1S2835 D125 IC116 D126 8-759-925-82 s IC SN74HC21NS 8-759-925-85 s IC SN74HC32NS IC117 D201 IC118 8-719-104-34 s DIODE 1S2835 8-759-925-85 s IC SN74HC32NS 8-759-925-82 s IC SN74HC21NS 8-759-925-74 s IC TC74HC04NS IC119 IC120 D202 D203 IC121 D206 D207 8-752-334-55 s IC CXD1175M 8-752-342-61 s IC CXD2105AQ 8-759-710-29 s IC NJM2235M 8-759-710-07 s IC NJM2234M 8-759-987-27 s IC LM1881M D211 IC123 IC124 IC125 IC126 8-719-104-34 s DIODE 1S2835 8-719-104-34 s DIODE 1S2835 8-719-104-34 s DIODE 1S2835 8-719-104-34 s DIODE 1S2835 8-719-105-57 s DIODE RD3.9M-B1 D212 D213 D221 D222 8-759-111-69 s IC UPC1037HA 8-759-234-77 s IC TC4S66F 8-759-983-69 s IC LM358PS 8-759-925-90 s IC SN74HC74NS 8-759-239-58 s IC TC74HC221AF D223 IC128 IC129 8-719-157-23 s DIODE RD4.7M-B 8-719-137-23 S DIODE RD4.76-B 8-719-915-43 S DIODE, VARICAP FC54M 8-719-104-34 S DIODE, VARICAP FC54M 8-719-104-34 S DIODE 152835 IC130 D225 IC131 D226 D301 8-759-926-07 s IC SN74HC132NS 8-759-710-29 s IC NJM2235M 8-759-980-04 s IC LM311PS 8-759-603-54 s IC M51271FP 8-759-710-86 s IC NJM2233BM-T1 IC132 DL101 1-415-348-21 s DELAY LINE 280NS IC133 1-415-309-00 s DELAY LINE 350nS 1-415-348-21 s DELAY LINE 280NS 1-415-348-21 s DELAY LINE 280NS IC134 DL102 IC137 DL103 IC138 **DL201** 1-415-309-00 s DELAY LINE 350nS **DL202** 8-759-710-86 s IC NJM2233BM-T1 8-759-926-07 s IC SN74HC132NS 8-759-980-04 s IC LM311PS 8-759-710-62 s IC NJM2246M 8-759-711-32 s IC NJM2245M IC139 **DL203** 1-415-348-21 s DELAY LINE 280NS IC140 IC141 1-239-085-11 s FILTER, LOW-PASS 1-239-085-11 s FILTER, LOW-PASS 1-239-085-11 s FILTER, LOW-PASS 1-235-758-11 s FILTER, LOW-PASS 1-235-758-11 s FILTER, LOW-PASS IC142 FL101 IC143 FL102 FL103 8-759-711-32 s IC NJM2245M 8-752-334-55 s IC CXD1175M 8-752-334-55 s IC CXD1175M 8-752-334-55 s IC CXD1175M 8-759-926-82 s IC SN74HC574ANS IC144 FL111 IC145 IC146 FL112 1-239-085-11 s FILTER, LOW-PASS 1-235-758-11 s FILTER, LOW-PASS 1-235-758-11 s FILTER, LOW-PASS 1-239-085-11 s FILTER, LOW-PASS 1-239-085-11 s FILTER, LOW-PASS IC147 FL113 IC148 FL114 FL115 8-759-926-82 s IC SN74HC574ANS 8-759-926-82 s IC SN74HC574ANS 8-759-710-29 s IC NJM2235M 8-759-980-04 s IC LM311PS 8-759-987-27 s IC LM1881M FL201 IC150 FL202 IC151 IC152 1-239-085-11 s FILTER, LOW-PASS 1-235-758-11 s FILTER, LOW-PASS 1-235-758-11 s FILTER, LOW-PASS 1-239-085-11 s FILTER, LOW-PASS 1-235-758-11 s FILTER, LOW-PASS FL203 IC153 FL211 FL212 8-759-239-58 s IC TC74HC221AF 8-759-239-58 s IC TC74HC221AF 8-759-927-46 s IC SN74HC00NS 8-759-239-58 s IC TC74HC221AF 8-759-926-24 s IC SN74HC164NS IC154 FL213 IC155 FL214 IC156 IC157 IC158 1-235-758-11 s FILTER, LOW-PASS FL215 8-759-231-53 s IC TA7805S 8-759-520-06 s IC NJM7809FA 8-759-520-06 s IC NJM7809FA 8-759-701-87 s IC NJM7909FA 8-759-710-29 s IC NJM2235M IC1 8-759-925-90 s IC SN74HC74NS 8-759-925-90 s IC SN74HC74NS 8-759-927-46 s IC SN74HC00NS 8-759-927-46 s IC SN74HC00NS IC2 IC160 IC3 IC161 TC162

(AD-76 BOARD used for DFS-500)	(AD-76 BOARD used for DFS-500)
Ref. No.	Ref. No.
or Q'ty Part No. SP Description	or Q'ty Part No. SP Description
IC163 8-759-925-90 s IC SN74HC74NS IC164 8-759-926-23 s IC SN74HC163NS IC165 8-759-926-23 s IC SN74HC163NS IC166 8-759-926-23 s IC SN74HC163NS IC167 8-759-925-74 s IC TC74HC04NS IC168 8-759-925-74 s IC SN74HC20ANS IC169 8-759-927-46 s IC SN74HC00NS IC170 8-759-925-78 s IC SN74HC10NS IC171 8-759-239-58 s IC TC74HC21AF IC172 8-759-926-29 s IC SN74HC175NS	IC246 8-752-334-55 S IC CXD1175M IC247 8-752-334-55 S IC CXD1175M IC248 8-759-926-82 S IC SN74HC574ANS IC249 8-759-926-82 S IC SN74HC574ANS IC250 8-759-926-82 S IC SN74HC574ANS
IC168 8-759-925-81 s IC SN74HC20ANS	IC251 8-759-710-29 S IC NJM2235M
IC169 8-759-927-46 s IC SN74HC00NS	IC252 8-759-980-04 S IC LM311PS
IC170 8-759-925-78 s IC SN74HC10NS	IC253 8-759-987-27 S IC LM1881M
IC171 8-759-239-58 s IC TC74HC221AF	IC254 8-759-239-58 S IC TC74HC221AF
IC172 8-759-926-29 s IC SN74HC175NS	IC255 8-759-239-58 S IC TC74HC221AF
IC173 8-759-926-24 s IC SN74HC164NS	IC256 8-759-927-46 S IC SN74HC00NS
IC174 8-759-927-46 s IC SN74HC00NS	IC257 8-759-239-58 S IC TC74HC221AF
IC175 8-759-239-58 s IC TC74HC221AF	IC258 8-759-926-24 S IC SN74HC164NS
IC176 8-749-901-21 s IC BX1461	IC259 8-759-925-90 S IC SN74HC74NS
IC177 8-759-908-17 s IC TL082CPS	IC260 8-759-925-90 S IC SN74HC74NS
IC178 8-759-926-48 s IC SN74HC244NS	IC261 8-759-927-46 S IC SN74HC00NS
IC179 8-759-926-03 s IC SN74HC113NS	IC262 8-759-927-46 S IC SN74HC00NS
IC201 8-759-710-29 s IC NJM2235M	IC263 8-759-925-90 S IC SN74HC74NS
IC202 8-759-710-62 s IC NJM2246M	IC264 8-759-926-23 S IC SN74HC163NS
IC203 8-759-710-29 s IC NJM2235M	IC265 8-759-926-23 S IC SN74HC163NS
IC204 8-759-710-62 S IC NJM2246M	IC266 8-759-926-23 S IC SN74HC163NS
IC205 8-759-710-07 S IC NJM2234M	IC267 8-759-925-74 S IC TC74HC04NS
IC206 8-759-711-32 S IC NJM2245M	IC268 8-759-925-81 S IC SN74HC20ANS
IC207 8-759-710-29 S IC NJM2235M	IC269 8-759-927-46 S IC SN74HC00NS
IC208 8-759-710-62 S IC NJM2246M	IC270 8-759-925-78 S IC SN74HC10NS
IC209 8-759-710-07 S IC NJM2234M IC210 8-759-711-32 S IC NJM2245M IC211 8-759-710-07 S IC NJM2234M IC212 8-759-711-32 S IC NJM2234M IC213 8-759-925-74 S IC TC74HC04NS	IC271 8-759-239-58 S IC TC74HC221AF IC272 8-759-926-29 S IC SN74HC175NS IC273 8-759-926-24 S IC SN74HC164NS IC274 8-759-927-46 S IC SN74HC00NS IC275 8-759-239-58 S IC TC74HC221AF
IC214 8-759-926-99 s IC SN74HC4075NS	IC276 8-749-901-21 s IC BX1461
IC215 8-759-926-99 s IC SN74HC4075NS	IC277 8-759-908-17 s IC TL082CPS
IC216 8-759-925-85 s IC SN74HC32NS	IC278 8-759-926-48 s IC SN74HC244NS
IC217 8-759-925-82 s IC SN74HC21NS	IC279 8-759-926-03 s IC SN74HC113NS
IC218 8-759-925-85 s IC SN74HC32NS	IC301 8-759-702-08 s IC NJM360M
IC219 8-759-925-85 s IC SN74HC32NS IC220 8-759-925-82 s IC SN74HC21NS	IC302 8-759-925-73 s IC SN74HC03NS
IC222 8-752-334-55 s IC CXD1175M IC223 8-752-342-61 s IC CXD2105AQ IC224 8-759-710-29 s IC NJM2235M IC225 8-759-710-07 s IC NJM2234M	L1 1-412-525-31 s INDUCTOR 10uH L2 1-412-525-31 s INDUCTOR 10uH L3 1-412-525-31 s INDUCTOR 10uH L101 1-408-789-21 s INDUCTOR CHIP 100UH L102 1-408-785-21 s INDUCTOR CHIP 47UH
IC226 8-759-987-27 s IC LM1881M	L103 1-408-785-21 s INDUCTOR CHIP 47UH
IC227 8-759-111-69 s IC UPC1037HA	L104 1-408-789-21 s INDUCTOR CHIP 100UH
IC228 8-759-234-77 s IC TC4S66F	L105 1-408-793-21 s INDUCTOR CHIP 220UH
IC229 8-759-983-69 s IC LM358PS	L111 1-408-797-11 s INDUCTOR CHIP 470UH
IC230 8-759-925-90 s IC SN74HC74NS IC231 8-759-239-58 s IC TC74HC221AF IC232 8-759-926-07 s IC SN74HC132NS IC233 8-759-710-29 s IC NJM2235M IC234 8-759-980-04 s IC LM311PS	L112 1-408-785-21 S INDUCTOR CHIP 47UH L113 1-408-782-11 S INDUCTOR CHIP 27UH L114 1-408-785-21 S INDUCTOR CHIP 47UH L115 1-408-782-11 S INDUCTOR CHIP 27UH L116 1-408-785-21 S INDUCTOR CHIP 47UH
IC237 8-759-603-54 s IC M51271FP IC238 8-759-710-86 s IC NJM2233BM-T1 IC239 8-759-710-86 s IC NJM2233BM-T1 IC240 8-759-926-07 s IC SN74HC132NS IC241 8-759-980-04 s IC LM311PS	L117 1-408-785-21 S INDUCTOR CHIP 47UH L118 1-408-785-21 S INDUCTOR CHIP 47UH L121 1-408-785-21 S INDUCTOR CHIP 47UH L122 1-408-785-21 S INDUCTOR CHIP 47UH L123 1-408-785-21 S INDUCTOR CHIP 47UH L123 1-408-785-21 S INDUCTOR CHIP 47UH
IC242 8-759-710-62 s IC NJM2246M	L123 1-408-785-21 S INDUCTOR CHIP 470H
IC243 8-759-711-32 s IC NJM2245M	L124 1-408-785-21 S INDUCTOR CHIP 47UH
IC244 8-759-711-32 s IC NJM2245M	L125 1-408-785-21 S INDUCTOR CHIP 47UH
IC245 8-752-334-55 s IC CXD1175M	L126 1-408-785-21 S INDUCTOR CHIP 47UH

(AD-76 BOARD used for DFS-500)	(AD-76 BOARD used for DFS-500)	
Ref. No. or Q'ty Part No. SP Description	Ref. No. or Q'ty Part No. SP Description	
L131 1-408-793-21 s INDUCTOR CHIP 220UH L132 1-408-765-21 s INDUCTOR, CHIP 1UH L201 1-408-789-21 s INDUCTOR CHIP 100UH L202 1-408-785-21 s INDUCTOR CHIP 47UH L203 1-408-785-21 s INDUCTOR CHIP 47UH		
L204 1-408-789-21 s INDUCTOR CHIP 100UH L205 1-408-793-21 s INDUCTOR CHIP 220UH L211 1-408-797-11 s INDUCTOR CHIP 470UH L212 1-408-785-21 s INDUCTOR CHIP 47UH L213 1-408-782-11 s INDUCTOR CHIP 27UH	Q156 8-729-120-28 s TRANSISTOR 2SC1623-L5L6 Q157 8-729-120-28 s TRANSISTOR 2SC1623-L5L6 Q158 8-729-120-28 s TRANSISTOR 2SC1623-L5L6 Q159 8-729-120-28 s TRANSISTOR 2SC1623-L5L6 Q160 8-729-120-28 s TRANSISTOR 2SC1623-L5L6	
L214 1-408-785-21 s INDUCTOR CHIP 47UH L215 1-408-782-11 s INDUCTOR CHIP 27UH L216 1-408-785-21 s INDUCTOR CHIP 47UH L217 1-408-785-21 s INDUCTOR CHIP 47UH L218 1-408-785-21 s INDUCTOR CHIP 47UH		
L221 1-408-785-21 s INDUCTOR CHIP 47UH L222 1-408-785-21 s INDUCTOR CHIP 47UH L223 1-408-785-21 s INDUCTOR CHIP 47UH L224 1-408-785-21 s INDUCTOR CHIP 47UH L225 1-408-785-21 s INDUCTOR CHIP 47UH	Q176 8-729-120-28 S TRANSISTOR 2SC1623-L5L6 Q177 8-729-116-64 S TRANSISTOR 2SK508-K51 Q178 8-729-216-22 S TRANSISTOR 2SA1162 Q179 8-729-120-28 S TRANSISTOR 2SC1623-L5L6 Q180 8-729-216-22 S TRANSISTOR 2SA1162	
L226 1-408-785-21 s INDUCTOR CHIP 47UH L231 1-408-793-21 s INDUCTOR CHIP 220UH L232 1-408-765-21 s INDUCTOR, CHIP 1UH L301 1-408-789-21 s INDUCTOR CHIP 100UH	Q191 8-729-120-28 S TRANSISTOR 2SC1623-L5L6 Q192 8-729-120-28 S TRANSISTOR 2SC1623-L5L6 Q193 8-729-120-28 S TRANSISTOR 2SC1623-L5L6 Q201 8-729-120-28 S TRANSISTOR 2SC1623-L5L6 Q202 8-729-120-28 S TRANSISTOR 2SC1623-L5L6	
LV101 1-410-286-11 s INDUCTOR, VAR 1uH LV201 1-410-286-11 s INDUCTOR, VAR 1uH	Q203 8-729-120-28 s TRANSISTOR 2SC1623-L5L6	
LV101 1-410-286-11 s INDUCTOR, VAR 1uH LV201 1-410-286-11 s INDUCTOR, VAR 1uH PS1 1-532-637-00 s LINK, IC 1.0A PS2 1-532-605-00 s LINK, IC 0.4A PS3 1-532-637-00 s LINK, IC 1.0A	Q204 8-729-116-64 S TRANSISTOR 2SK508-K51 Q205 8-729-216-22 S TRANSISTOR 2SA1162 Q206 8-729-120-28 S TRANSISTOR 2SC1623-L5L6 Q207 8-729-120-28 S TRANSISTOR 2SC1623-L5L6	
Q101 8-729-120-28 s TRANSISTOR 2SC1623-L5L6 Q102 8-729-120-28 s TRANSISTOR 2SC1623-L5L6 Q103 8-729-120-28 s TRANSISTOR 2SC1623-L5L6 Q104 8-729-116-64 s TRANSISTOR 2SC1623-L5L6 Q105 8-729-216-22 s TRANSISTOR 2SA508-R51 Q105 8-729-216-22 s TRANSISTOR 2SA1162	Q208 8-729-120-28 s TRANSISTOR 2SC1623-L5L6 Q211 8-729-120-28 s TRANSISTOR 2SC1623-L5L6 Q212 8-729-120-28 s TRANSISTOR 2SC1623-L5L6 Q213 8-729-120-28 s TRANSISTOR 2SC1623-L5L6 Q214 8-729-120-28 s TRANSISTOR 2SC1623-L5L6	
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Q113 8-729-120-28 s TRANSISTOR 2SC1623-L5L6 Q114 8-729-120-28 s TRANSISTOR 2SC1623-L5L6 Q115 8-729-216-22 s TRANSISTOR 2SA1162 Q121 8-729-120-28 s TRANSISTOR 2SC1623-L5L6 Q122 8-729-120-28 s TRANSISTOR 2SC1623-L5L6	Q225 8-729-120-28 s TRANSISTOR 2SC1623-L5L6 Q231 8-729-216-22 s TRANSISTOR 2SA1162 Q232 8-729-216-22 s TRANSISTOR 2SA1162 Q233 8-729-120-28 s TRANSISTOR 2SC1623-L5L6 Q234 8-729-120-28 s TRANSISTOR 2SC1623-L5L6	
Q123 8-729-120-28 S TRANSISTOR 2SC1623-L5L6 Q124 8-729-120-28 S TRANSISTOR 2SC1623-L5L6 Q125 8-729-120-28 S TRANSISTOR 2SC1623-L5L6 Q131 8-729-216-22 S TRANSISTOR 2SA1162 Q132 8-729-216-22 S TRANSISTOR 2SA1162	Q235 8-729-120-28 S TRANSISTOR 2SC1623-L5L6 Q236 8-729-216-22 S TRANSISTOR 2SA1162 Q237 8-729-216-22 S TRANSISTOR 2SA1162 Q238 8-729-120-28 S TRANSISTOR 2SC1623-L5L6 Q239 8-729-120-28 S TRANSISTOR 2SC1623-L5L6	
Q133 8-729-120-28 S TRANSISTOR 2SC1623-L5L6 Q134 8-729-120-28 S TRANSISTOR 2SC1623-L5L6 Q135 8-729-120-28 S TRANSISTOR 2SC1623-L5L6 Q136 8-729-216-22 S TRANSISTOR 2SA1162 Q137 8-729-216-22 S TRANSISTOR 2SA1162	Q240 8-729-120-28 s TRANSISTOR 2SC1623-L5L6 Q241 8-729-120-28 s TRANSISTOR 2SC1623-L5L6 Q251 8-729-120-28 s TRANSISTOR 2SC1623-L5L6 Q252 8-729-120-28 s TRANSISTOR 2SC1623-L5L6 Q253 8-729-120-28 s TRANSISTOR 2SC1623-L5L6	
Q138 8-729-120-28 S TRANSISTOR 2SC1623-L5L6 Q139 8-729-120-28 S TRANSISTOR 2SC1623-L5L6 Q140 8-729-120-28 S TRANSISTOR 2SC1623-L5L6 Q141 8-729-120-28 S TRANSISTOR 2SC1623-L5L6	Q254 8-729-120-28 S TRANSISTOR 2SC1623-L5L6 Q255 8-729-120-28 S TRANSISTOR 2SC1623-L5L6 Q256 8-729-120-28 S TRANSISTOR 2SC1623-L5L6 Q257 8-729-120-28 S TRANSISTOR 2SC1623-L5L6	

DFS-500/5

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(AD-76 BOARD used for DFS-500)
(AD-76 BOARD used for DFS-500)
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Ref. No. or Q'ty Part No.
                                                                                                                                                                                                                                                                             SP Description
                                                                    SP Description
                                                                                                                                                                                                                                        1-216-635-11 s METAL, CHIP 220 0.5% 1/10W
1-216-603-11 s METAL, CHIP 10 0.5% 1/10W
                             8-729-120-28 s TRANSISTOR 2SC1623-L5L6
8-729-120-28 s TRANSISTOR 2SC1623-L5L6
8-729-120-28 s TRANSISTOR 2SC1623-L5L6
8-729-116-64 s TRANSISTOR 2SK508-K51
8-729-216-22 s TRANSISTOR 2SA1162
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 Q271
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                              8-729-120-28 s TRANSISTOR 2SC1623-L5L6
 0273
                              8-729-116-64 s TRANSISTOR 25K508-K51
8-729-216-22 s TRANSISTOR 25K162
8-729-120-28 s TRANSISTOR 25C1623-L5L6
8-729-116-64 s TRANSISTOR 25K508-K51
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                               8-729-216-22 s TRANSISTOR 2SA1162
                              8-729-120-28 s TRANSISTOR 2SC1623-L5L6
8-729-216-22 s TRANSISTOR 2SA1162
8-729-120-28 s TRANSISTOR 2SC1623-L5L6
8-729-120-28 s TRANSISTOR 2SC1623-L5L6
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                               8-729-120-28 s TRANSISTOR 2SC1623-L5L6
8-729-120-28 s TRANSISTOR 2SC1623-L5L6
8-729-120-28 s TRANSISTOR 2SC1623-L5L6
8-729-120-28 s TRANSISTOR 2SC1623-L5L6
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                                8-729-116-64 s TRANSISTOR 2SK508-K51
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                                8-729-216-22 s TRANSISTOR 2SA1162
8-729-120-28 s TRANSISTOR 2SC1623-L5L6
8-729-112-65 s TRANSISTOR 2SA1462-Y33
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                          ↑1-216-377-11 s METAL 4.7 5% 2W

↑1-216-377-11 s METAL 4.7 5% 2W

1-216-371-00 s METAL 1.5 5% 2W

1-216-371-00 s METAL 1.5 5% 2W

1-216-377-11 s METAL 4.7 5% 2W
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                                 1-216-679-11 s METAL, CHIP 15K 0.5% 1/10W 1-216-679-11 s METAL, CHIP 15K 0.5% 1/10W 1-216-647-11 s METAL, CHIP 680 0.5% 1/10W 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W
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                                 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W
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(AD-76 BOARD used for DFS-500)
(AD-76 BOARD used for DFS-500)
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Ref. No. or Q'ty Part No.
                                                                     SP Description
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                             1-216-635-11 s METAL, CHIP 220 0.5% 1/10W 1-216-649-11 s METAL, CHIP 820 0.5% 1/10W 1-216-663-11 s METAL, CHIP 3.3% 0.5% 1/10W 1-216-671-11 s METAL, CHIP 6.8% 0.5% 1/10W 1-216-653-11 s METAL, CHIP 1.2% 0.5% 1/10W
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                             1-216-697-11 s METAL, CHIP 82K 0.5% 1/10W 1-216-673-11 s METAL, CHIP 8.2K 0.5% 1/10W 1-216-683-11 s METAL, CHIP 22K 0.5% 1/10W 1-218-768-11 s METAL 470K 0.5% 1/10W 1-216-619-11 s METAL, CHIP 47 0.5% 1/10W
                                                                                                                                                                                                                                              1-216-663-11 s METAL, CHIP 3.3K 0.5% 1/10W 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W 1-216-691-11 s METAL, CHIP 47K 0.5% 1/10W 1-216-689-11 s METAL, CHIP 39K 0.5% 1/10W
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                               1-216-639-11 S METAL, CHIP 330 0.5% 1/10W 1-216-685-11 S METAL, CHIP 27K 0.5% 1/10W 1-216-671-11 S METAL, CHIP 6.8K 0.5% 1/10W 1-216-671-11 S METAL, CHIP 6.8K 0.5% 1/10W 1-216-683-11 S METAL, CHIP 22K 0.5% 1/10W
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                               1-216-663-11 s METAL, CHIP 3.3K 0.5% 1/10W 1-216-683-11 s METAL, CHIP 22K 0.5% 1/10W 1-216-671-11 s METAL, CHIP 6.8K 0.5% 1/10W 1-216-671-11 s METAL, CHIP 6.8K 0.5% 1/10W 1-216-649-11 s METAL, CHIP 820 0.5% 1/10W
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                               1-216-663-11 s METAL, CHIP 3.3K 0.5% 1/10W 1-216-671-11 s METAL, CHIP 6.8K 0.5% 1/10W 1-216-671-11 s METAL, CHIP 6.8K 0.5% 1/10W 1-216-663-11 s METAL, CHIP 3.3K 0.5% 1/10W 1-218-776-11 s METAL 1M 0.5% 1/10W
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  R672
                                                                                                                                                                                                                  R820
  R678
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  R681
                                                                                                                                                                                                                                              1-216-649-11 s METAL, CHIP 820 0.5% 1/10W 1-216-663-11 s METAL, CHIP 3.3% 0.5% 1/10W 1-216-663-11 s METAL, CHIP 3.3% 0.5% 1/10W 1-216-655-11 s METAL, CHIP 1.5% 0.5% 1/10W 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W
                               1-216-635-11 S METAL, CHIP 220 0.5% 1/10W 1-216-697-11 S METAL, CHIP 82K 0.5% 1/10W 1-216-663-11 S METAL, CHIP 3.3K 0.5% 1/10W 1-218-764-11 S METAL 330K 0.5% 1/10W
                                                                                                                                                                                                                  R825
  R684
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  R688
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  R689
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   R695
                                 1-216-669-11 s METAL, CHIP 5.6K 0.5% 1/10W
                                                                                                                                                                                                                  R843
   R702
                                1-216-635-11 s METAL, CHIP 220 0.5% 1/10W
1-216-663-11 s METAL, CHIP 3.3% 0.5% 1/10W
1-216-635-11 s METAL, CHIP 220 0.5% 1/10W
1-216-635-11 s METAL, CHIP 220 0.5% 1/10W
1-216-663-11 s METAL, CHIP 3.3% 0.5% 1/10W
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  R704
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  R705
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  R706
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  R707
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  R711
                                                                                                                                                                                                                                              1-216-643-11 s METAL, CHIP 470 0.5% 1/10W 1-216-691-11 s METAL, CHIP 47K 0.5% 1/10W 1-216-691-11 s METAL, CHIP 47K 0.5% 1/10W 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W 1-216-679-11 s METAL, CHIP 15K 0.5% 1/10W
                                                                                                                                                                                                                  R853
  R714
                                1-216-655-11 s METAL, CHIP 1.5% 0.5% 1/10W

1-216-635-11 s METAL, CHIP 220 0.5% 1/10W

1-216-649-11 s METAL, CHIP 820 0.5% 1/10W

1-216-663-11 s METAL, CHIP 820 0.5% 1/10W
  R720
R723
R725
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                                                                                                                                                                                                                  R856
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   R727
                                                                                                                                                                                                                                              1-216-663-11 s METAL, CHIP 3.3K 0.5% 1/10W 1-216-671-11 s METAL, CHIP 6.8K 0.5% 1/10W 1-216-643-11 s METAL, CHIP 470 0.5% 1/10W 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W
                                1-216-663-11 s METAL, CHIP 3.3K 0.5% 1/10W 1-216-655-11 s METAL, CHIP 1.5K 0.5% 1/10W 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W 1-216-649-11 s METAL, CHIP 820 0.5% 1/10W 1-216-663-11 s METAL, CHIP 3.3K 0.5% 1/10W
                                                                                                                                                                                                                  R858
   R729
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  R740
R743
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   R745
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   R747
                                1-216-663-11 s METAL, CHIP 3.3K 0.5% 1/10W 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W 1-216-643-11 s METAL, CHIP 470 0.5% 1/10W 1-216-691-11 s METAL, CHIP 47K 0.5% 1/10W
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  R749
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  R751
  R752
R753
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   R754
                                1-216-691-11 s METAL, CHIP 47K 0.5% 1/10W 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W 1-216-679-11 s METAL, CHIP 15K 0.5% 1/10W 1-216-663-11 s METAL, CHIP 3.3K 0.5% 1/10W 1-216-671-11 s METAL, CHIP 6.8K 0.5% 1/10W
                                                                                                                                                                                                                                              1-216-663-11 s METAL, CHIP 3.3K 0.5% 1/10W 1-216-663-11 s METAL, CHIP 3.3K 0.5% 1/10W 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W 1-216-691-11 s METAL, CHIP 47K 0.5% 1/10W
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   R756
  Ř757
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  R758
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   R759
                                1-216-643-11 s METAL, CHIP 470 0.5% 1/10W 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W 1-216-691-11 s METAL, CHIP 47K 0.5% 1/10W
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   R761
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  R766
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  R767
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(AD-76 BOARD used for DFS-500)
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                                                                                                                                                                             Ref. No. or Q'ty Part No.
Ref. No. or Q'ty Part No. SP Description
                                                                                                                                                                                                                                      SP Description
                                                                                                                                                                                                      1-228-994-00 s RES, ADJ METAL 10K
1-230-504-11 s RES, ADJ METAL 220
1-228-990-00 s RES, ADJ METAL 1K
1-228-993-00 s RES, ADJ METAL 4.7K
1-228-989-00 s RES, ADJ METAL 470
                        1-216-663-11 s METAL, CHIP 3.3K 0.5% 1/10W 1-216-663-11 s METAL, CHIP 3.3K 0.5% 1/10W 1-216-663-11 s METAL, CHIP 15K 0.5% 1/10W 1-216-663-11 s METAL, CHIP 3.3K 0.5% 1/10W 1-216-663-11 s METAL, CHIP 3.3K 0.5% 1/10W
                                                                                                                                                                              RV103
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R895
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R898
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R904
                                                                                                                                                                              RV114
R905
                                                                                                                                                                                                      1-228-989-00 s RES, ADJ METAL 470
1-228-990-00 s RES, ADJ METAL 1K
1-230-504-11 s RES, ADJ METAL 220
1-228-989-00 s RES, ADJ METAL 470
1-228-989-00 s RES, ADJ METAL 470
                         1-218-764-11 s METAL 330K 0.5% 1/10W
1-216-657-11 s METAL, CHIP 1.8K 0.5% 1/10W
1-218-772-11 s METAL 680K 0.5% 1/10W
1-216-687-11 s METAL, CHIP 33K 0.5% 1/10W
1-216-689-11 s METAL, CHIP 39K 0.5% 1/10W
                                                                                                                                                                              RV115
R913
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R917
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R919
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 R920
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 R921
                         1-216-669-11 S METAL, CHIP 5.6K 0.5% 1/10W 1-216-685-11 S METAL, CHIP 27K 0.5% 1/10W 1-216-679-11 S METAL, CHIP 15K 0.5% 1/10W 1-218-754-11 S METAL, CHIP 120K 0.50% 1/10W 1-216-677-11 S METAL, CHIP 120K 0.50% 1/10W
                                                                                                                                                                                                      1-228-989-00 s RES, ADJ METAL 470
1-228-989-00 s RES, ADJ METAL 470
1-228-989-00 s RES, ADJ METAL 470
1-228-993-00 s RES, ADJ METAL 4.7K
1-228-993-00 s RES, ADJ METAL 4.7K
                                                                                                                                                                              RV121
 R924
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RV123
RV131
 R925
 R936
 R937
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 R941
                         1-218-760-11 s METAL 220K 0.5% 1/10W
1-216-691-11 s METAL, CHIP 47K 0.5% 1/10W
1-216-683-11 s METAL, CHIP 22K 0.5% 1/10W
1-216-687-11 s METAL, CHIP 33K 0.5% 1/10W
1-216-683-11 s METAL, CHIP 22K 0.5% 1/10W
                                                                                                                                                                                                       1-228-993-00 s RES, ADJ METAL 4.7K
1-228-994-00 s RES, ADJ METAL 10K
1-230-504-11 s RES, ADJ METAL 220
1-228-990-00 s RES, ADJ METAL 1K
 R942
                                                                                                                                                                               RV203
 R944
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 R949
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 R950
                                                                                                                                                                                                       1-228-993-00 s RES, ADJ METAL 4.7K
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 R951
                                                                                                                                                                                                       1-228-989-00 s RES, ADJ METAL 470
1-228-989-00 s RES, ADJ METAL 470
1-228-990-00 s RES, ADJ METAL 1K
1-230-504-11 s RES, ADJ METAL 220
1-228-989-00 s RES, ADJ METAL 470
                         1-216-635-11 s METAL, CHIP 220 0.5% 1/10W 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W 1-218-760-11 s METAL 220K 0.5% 1/10W 1-218-764-11 s METAL 330K 0.5% 1/10W 1-216-623-11 s METAL, CHIP 68 0.5% 1/10W
 R952
                                                                                                                                                                               RV215
 R953
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  R954
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  R955
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                         1-216-635-11 s METAL, CHIP 220 0.5% 1/10W
1-216-623-11 s METAL, CHIP 68 0.5% 1/10W
1-218-764-11 s METAL 330K 0.5% 1/10W
1-216-657-11 s METAL, CHIP 1.8K 0.5% 1/10W
1-218-772-11 s METAL 680K 0.5% 1/10W
                                                                                                                                                                               RV219
                                                                                                                                                                                                       1-228-989-00 s RES, ADJ METAL 470
  R957
                                                                                                                                                                                                       1-228-989-00 s RES, ADJ METAL 470
1-228-989-00 s RES, ADJ METAL 470
1-228-989-00 s RES, ADJ METAL 470
1-228-989-00 s RES, ADJ METAL 477
1-228-993-00 s RES, ADJ METAL 4.7K
                                                                                                                                                                               RV221
  R958
                                                                                                                                                                               RV222
  R1013
                                                                                                                                                                               RV223
  R1017
                                                                                                                                                                               RV231
  R1019
                          1-216-687-11 s METAL, CHIP 33K 0.5% 1/10W 1-216-689-11 s METAL, CHIP 39K 0.5% 1/10W 1-216-669-11 s METAL, CHIP 5.6K 0.5% 1/10W 1-216-685-11 s METAL, CHIP 27K 0.5% 1/10W 1-216-679-11 s METAL, CHIP 15K 0.5% 1/10W
                                                                                                                                                                               RV301
                                                                                                                                                                                                       1-237-503-21 s RES, ADJ METAL 10K
1-228-990-00 s RES, ADJ METAL 1K
                                                                                                                                                                               RV302
  R1021
  R1024
                                                                                                                                                                                                       1-570-514-11 s SWITCH, SLIDE
1-570-514-11 s SWITCH, SLIDE
1-570-514-11 s SWITCH, SLIDE
1-570-514-11 s SWITCH, SLIDE
  R1025
  R1036
                          1-218-754-11 s METAL, CHIP 120K 0.50% 1/10W 1-216-677-11 s METAL, CHIP 12K 0.5% 1/10W 1-218-760-11 s METAL 220K 0.5% 1/10W 1-216-687-11 s METAL, CHIP 33K 0.5% 1/10W 1-216-691-11 s METAL, CHIP 47K 0.5% 1/10W
  R1037
  R1041
                                                                                                                                                                                                       1-577-089-11 s VCO, CRYSTAL 14.318180MHz
1-567-866-11 s CRYSTAL, 14.31818MHz
1-577-089-11 s VCO, CRYSTAL 14.318180MHz
1-567-866-11 s CRYSTAL, 14.31818MHz
                                                                                                                                                                              X101
  R1042
                                                                                                                                                                               X102
  R1043
                                                                                                                                                                               X201
  R1044
                                                                                                                                                                               X202
                          1-216-683-11 s METAL, CHIP 22K 0.5% 1/10W 1-216-687-11 s METAL, CHIP 33K 0.5% 1/10W 1-216-683-11 s METAL, CHIP 22K 0.5% 1/10W 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W
  R1049
  R1050
  R1051
  R1052
  R1053
                          1-218-760-11 s METAL 220K 0.5% 1/10W
1-218-764-11 s METAL 330K 0.5% 1/10W
1-216-623-11 s METAL, CHIP 68 0.5% 1/10W
1-216-635-11 s METAL, CHIP 220 0.5% 1/10W
1-216-623-11 s METAL, CHIP 68 0.5% 1/10W
  R1054
  R1055
  R1056
  R1057
  R1058
                           1-231-385-00 s RESISTOR BLOCK 4.7Kx8
  RB1
                           1-231-385-00 s RESISTOR BLOCK 4.7Kx8
  RB2
                          1-231-385-00 s RESISTOR BLOCK 4.7Kx8
1-231-385-00 s RESISTOR BLOCK 4.7Kx8
  RB3
  RB101
                           1-231-385-00 s RESISTOR BLOCK 4.7Kx8
  RB102
                           1-231-385-00 s RESISTOR BLOCK 4.7Kx8
  RB103
                           1-228-993-00 s RES, ADJ METAL 4.7K
1-228-993-00 s RES, ADJ METAL 4.7K
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RV101 RV102



The same of the sa	(AD-76P BOARD used for DFS-500P)
AD-76P BOARD used for DFS-500P	Ref. No.
Ref. No. or Q'ty Part No. SP Description	or Q'ty Part No. SP Description
1pc A-8271-697-A o MOUNTED CIRCUIT BOARD, AD-76P 2pcs 3-166-184-01 o LEVER, PC BOARD 2pcs 3-166-185-01 s NUT, PLATE 1pc 3-178-157-01 o PLATE, SHIELD 8pcs 4-886-821-11 s SCREW, S TIGHT, +PTTWH 3X6	C119 1-162-638-11 s CERAMIC, CHIP 1uF 16V C120 1-126-394-11 s ELECT, CHIP 10uF 20% 16V C121 1-126-394-11 s ELECT, CHIP 10uF 20% 16V C122 1-126-394-11 s ELECT, CHIP 10uF 20% 16V C123 1-126-396-11 s ELECT, CHIP 47uF 20% 16V
2pcs 7-622-207-05 s N 2.6, TYPE 2 2pcs 7-626-320-11 s PIN, SPRING 3X8 6pcs 7-628-254-40 s SCREW +PS 2.6X12	C125 1-126-394-11 S ELECT, CHIP 10uF 20% 16V C126 1-126-394-11 S ELECT, CHIP 10uF 20% 16V C127 1-162-638-11 S CERAMIC, CHIP 1uF 16V C128 1-126-394-11 S ELECT, CHIP 10uF 20% 16V C129 1-126-394-11 S ELECT, CHIP 10uF 20% 16V
2pcs 7-622-207-05 s N 2.6, TYPE 2 2pcs 7-626-320-11 s PIN, SPRING 3X8 6pcs 7-628-254-40 s SCREW +PS 2.6X12 C1 1-126-934-11 s ELECT 220uF 20X 16V C2 1-162-638-11 s CERAMIC, CHIP 1uF 16V C3 1-126-934-11 s ELECT 220uF 20X 16V C4 1-162-638-11 s CERAMIC, CHIP 1uF 16V C5 1-126-934-11 s ELECT 220uF 20X 16V C6 1-162-638-11 s CERAMIC, CHIP 1uF 16V C7 1-162-638-11 s CERAMIC, CHIP 1uF 16V	C130 1-126-394-11 S ELECT, CHIP 10uF 20% 16V C131 1-126-396-11 S ELECT, CHIP 47uF 20% 16V C133 1-126-394-11 S ELECT, CHIP 10uF 20% 16V C134 1-126-394-11 S ELECT, CHIP 10uF 20% 16V C134 1-126-394-11 S ELECT, CHIP 10uF 20% 16V
C8 1-126-392-11 s ELECT, CHIP 100uF 20% 6.3V C9 1-126-934-11 s ELECT 220uF 20% 16V C10 1-162-638-11 s CERAMIC, CHIP 1uF 16V	C136 1-126-394-11 S ELECT, CHIP 10uF 20% 16V C137 1-126-394-11 S ELECT, CHIP 10uF 20% 16V C138 1-126-394-11 S ELECT, CHIP 10uF 20% 16V C139 1-126-396-11 S ELECT, CHIP 47uF 20% 16V
C12 1-126-396-11 s ELECT, CHIP 470F 20% 16V C13 1-126-934-11 s ELECT 2200F 20% 16V C14 1-162-638-11 s CERAMIC, CHIP 10F 16V C15 1-162-638-11 s CERAMIC, CHIP 10F 16V	C142 1-126-394-11 s ELECT, CHIP 10uF 20% 16V C143 1-162-638-11 s CERAMIC, CHIP 1uF 16V C144 1-126-394-11 s ELECT, CHIP 10uF 20% 16V C145 1-196-394-11 s FLECT, CHIP 10uF 20% 16V
C16 1-126-396-11 S ELECT, CHIP 47uF 20% 16V C17 1-126-934-11 S ELECT 220uF 20% 16V C18 1-162-638-11 S CERAMIC, CHIP 1uF 16V C19 1-126-934-11 S ELECT 220uF 20% 16V C20 1-162-638-11 S CERAMIC, CHIP 1uF 16V C21 1-126-934-11 S ELECT 220uF 20% 16V C21 1-126-934-11 S ELECT 220uF 20% 16V	
C21 1-126-934-11 S ELECT 220uF 20% 16V C22 1-162-638-11 S CERAMIC, CHIP 1uF 16V C23 1-162-638-11 S CERAMIC, CHIP 1uF 16V C24 1-126-396-11 S ELECT, CHIP 47uF 20% 16V C25 1-126-925-11 S ELECT 470uF 20% 10V C26 1-162-638-11 S CERAMIC, CHIP 1uF 16V C27 1-126-925-11 S ELECT 470uF 20% 10V C28 1-162-638-11 S CERAMIC, CHIP 1uF 16V C27 1-162-638-11 S CERAMIC, CHIP 1uF 16V	C204 1-126-394-11 s ELECT, CHIP 10uF 20% 16V C205 1-126-394-11 s ELECT, CHIP 10uF 20% 16V C206 1-126-394-11 s ELECT, CHIP 10uF 20% 16V C207 1-126-396-11 s ELECT, CHIP .47uF 20% 16V C209 1-126-394-11 s ELECT, CHIP 10uF 20% 16V
C31 1-126-394-11 s ELECT, CHIP 10UF 20% 16V C35 1-163-227-11 s CERAMIC, CHIP 10PF 5% 50V	C212 1-120-394-11 S ELECT, CHIP 10UF 20% 16V C213 1-126-394-11 S ELECT, CHIP 10UF 20% 16V C214 1-126-394-11 S ELECT, CHIP 10UF 20% 16V
C36 1-126-394-11 S ELECT, CHIP 10uF 20% 16V C37 1-126-396-11 S ELECT, CHIP 47uF 20% 16V C39 1-163-235-11 S CERAMIC, CHIP 22PF 5% 50V C41 1-126-392-11 S ELECT, CHIP 100uF 20% 6.3V C101 1-126-394-11 S ELECT, CHIP 10uF 20% 16V C102 1-126-394-11 S ELECT, CHIP 10uF 20% 16V	C215 1-126-396-11 S ELECT, CHIP 47uF 20% 16V C217 1-126-394-11 S ELECT, CHIP 10uF 20% 16V C218 1-126-394-11 S ELECT, CHIP 10uF 20% 16V C219 1-162-638-11 S CERAMIC, CHIP 10uF 20% 16V C220 1-126-394-11 S ELECT, CHIP 10uF 20% 16V C221 1-126-394-11 S ELECT, CHIP 10uF 20% 16V
C103 1-162-638-11 s CERAMIC, CHIP 1UF 16V C104 1-126-394-11 s ELECT, CHIP 10UF 20% 16V C105 1-126-394-11 s ELECT, CHIP 10UF 20% 16V C106 1-126-394-11 s ELECT, CHIP 10UF 20% 16V	C222 1-126-394-11 s ELECT, CHIP 10uF 20% 16V C223 1-126-396-11 s ELECT, CHIP 47uF 20% 16V C225 1-126-394-11 s ELECT, CHIP 10uF 20% 16V C226 1-126-394-11 s ELECT, CHIP 10uF 20% 16V C227 1-162-638-11 s CERAMIC, CHIP 1uF 16V
C109 1-126-394-11 s ELECT, CHIP 10uF 20% 16V C110 1-126-394-11 s ELECT, CHIP 10uF 20% 16V C111 1-162-638-11 s CERAMIC, CHIP 1uF 16V C112 1-126-394-11 s ELECT, CHIP 10uF 20% 16V	C228 1-126-394-11 s ELECT, CHIP 10uF 20% 16V C229 1-126-394-11 s ELECT, CHIP 10uF 20% 16V C230 1-126-394-11 s ELECT, CHIP 10uF 20% 16V C231 1-126-396-11 s ELECT, CHIP 47uF 20% 16V C233 1-126-394-11 s ELECT, CHIP 10uF 20% 16V
C113 1-126-394-11 S ELECT, CHIP 10uF 20% 16V C114 1-126-394-11 S ELECT, CHIP 10uF 20% 16V C115 1-126-396-11 S ELECT, CHIP 47uF 20% 16V C117 1-126-394-11 S ELECT, CHIP 10uF 20% 16V C118 1-126-394-11 S ELECT, CHIP 10uF 20% 16V	C234 1-126-394-11 S ELECT, CHIP 10uF 20% 16V C235 1-162-638-11 S CERAMIC, CHIP 1uF 16V C236 1-126-394-11 S ELECT, CHIP 10uF 20% 16V C237 1-126-394-11 S ELECT, CHIP 10uF 20% 16V

(AD-76P BOARD used for DFS-500P)	(AD-76P BOARD used for DFS-500P)
Ref. No. or Q'ty Part No. SP Description	Ref. No. or Q'ty Part No. SP Description
C238 1-126-394-11 s ELECT, CHIP 10uF 20% 16V C239 1-126-396-11 s ELECT, CHIP 47uF 20% 16V C241 1-126-394-11 s ELECT, CHIP 10uF 20% 16V C242 1-126-394-11 s ELECT, CHIP 10uF 20% 16V C243 1-162-638-11 s CERAMIC, CHIP 1uF 16V	C421 1-126-392-11 s ELECT, CHIP 100UF 20% 6.3V C432 1-163-224-11 s CERAMIC 7PF 0.25PF 50V C441 1-126-394-11 s ELECT, CHIP 10UF 20% 16V C442 1-126-394-11 s ELECT, CHIP 10UF 20% 16V C443 1-126-394-11 s ELECT, CHIP 10UF 20% 16V
C244 1-126-394-11 S ELECT, CHIP 10uF 20% 16V C245 1-126-394-11 S ELECT, CHIP 10uF 20% 16V C246 1-126-394-11 S ELECT, CHIP 10uF 20% 16V C247 1-126-396-11 S ELECT, CHIP 47uF 20% 16V C301 1-163-222-11 S CERAMIC, CHIP 5PF 50V	C444 1-126-394-11 s ELECT, CHIP 10uF 20% 16V C447 1-126-396-11 s ELECT, CHIP 47uF 20% 16V C451 1-163-227-11 s CERAMIC, CHIP 10PF 5% 50V C452 1-163-251-11 s CERAMIC, CHIP 100PF 5% 50V C453 1-163-251-11 s CERAMIC, CHIP 100PF 5% 50V
C302 1-163-222-11 s CERAMIC, CHIP 5PF 50V C304 1-163-227-11 s CERAMIC, CHIP 10PF 5% 50V C305 1-126-394-11 s ELECT, CHIP 10uF 20% 16V C306 1-126-396-11 s ELECT, CHIP 47uF 20% 16V C307 1-162-638-11 s CERAMIC, CHIP 1uF 16V	C455 1-126-392-11 s ELECT, CHIP 100uF 20% 6.3V C459 1-164-232-11 s CERAMIC 0.01uF 10% 100V C461 1-126-394-11 s ELECT, CHIP 10uF 20% 16V C463 1-163-035-00 s CERAMIC, CHIP 0.047uF 50V C466 1-162-638-11 s CERAMIC, CHIP 1uF 16V
C309 1-126-396-11 S ELECT, CHIP 47uF 20% 16V C310 1-126-392-11 S ELECT, CHIP 100uF 20% 6.3V C311 1-126-392-11 S ELECT, CHIP 100uF 20% 6.3V C312 1-126-392-11 S ELECT, CHIP 100uF 20% 6.3V C313 1-162-638-11 S CERAMIC, CHIP 1uF 16V	
C318 1-163-133-00 s CERAMIC, CHIP 470PF 5% 50V C319 1-126-394-11 s ELECT, CHIP 10uF 20% 16V C321 1-126-392-11 s ELECT, CHIP 100uF 20% 6.3V C332 1-163-224-11 s CERAMIC 7PF 0.25PF 50V C341 1-126-394-11 s ELECT, CHIP 10uF 20% 16V	C485 1-163-239-11 s CERAMIC, CHIP 33PF 5% 50V C486 1-163-239-11 s CERAMIC, CHIP 33PF 5% 50V C487 1-163-239-11 s CERAMIC, CHIP 33PF 5% 50V C488 1-163-121-00 s CERAMIC, CHIP 150PF 5% 50V C501 1-126-394-11 s ELECT, CHIP 10
C342 1-126-394-11 S ELECT, CHIP 10uF 20% 16V C343 1-126-394-11 S ELECT, CHIP 10uF 20% 16V C344 1-126-394-11 S ELECT, CHIP 10uF 20% 16V C347 1-126-396-11 S ELECT, CHIP 47uF 20% 16V C351 1-163-227-11 S CERAMIC, CHIP 10PF 5% 50V	C502 1-126-394-11 s ELECT, CHIP 10uF 20% 16V C507 1-162-638-11 s CERAMIC, CHIP 1uF 16V C508 1-162-638-11 s CERAMIC, CHIP 1uF 16V C510 1-126-396-11 s ELECT, CHIP 47uF 20% 16V C521 1-126-392-11 s ELECT, CHIP 100uF 20% 6.3V
C352 1-163-251-11 s CERAMIC, CHIP 100PF 5% 50V C353 1-163-251-11 s CERAMIC, CHIP 100PF 5% 50V C355 1-126-392-11 s ELECT, CHIP 100UF 20% 6.3V C359 1-164-232-11 s CERAMIC 0.01UF 10% 100V C361 1-126-394-11 s ELECT, CHIP 10	C523 1-163-251-11 s CERAMIC, CHIP 100PF 5% 50V C524 1-163-275-11 s CERAMIC, CHIP 0.001uF 5% 50V C525 1-162-638-11 s CERAMIC, CHIP 1uF 16V C526 1-164-005-11 s CERAMIC, CHIP 0.47uF 25V C527 1-162-638-11 s CERAMIC, CHIP 1uF 16V
C363 1-163-035-00 s CERAMIC, CHIP 0.047uF 50V C366 1-162-638-11 s CERAMIC, CHIP 1uF 16V C367 1-126-392-11 s ELECT, CHIP 100uF 20% 6.3V C370 1-164-232-11 s CERAMIC 0.01uF 10% 100V C371 1-164-232-11 s CERAMIC 0.01uF 10% 100V	C528 1-163-035-00 s CERAMIC, CHIP 0.047uF 50V C529 1-163-035-00 s CERAMIC, CHIP 0.047uF 50V C530 1-162-638-11 s CERAMIC, CHIP 1uF 16V C531 1-126-392-11 s ELECT, CHIP 100uF 20% 6.3V C534 1-126-396-11 s ELECT, CHIP 47uF 20% 16V
C382 1-163-251-11 s CERAMIC, CHIP 100PF 5% 50V C383 1-163-251-11 s CERAMIC, CHIP 100PF 5% 50V C385 1-163-239-11 s CERAMIC, CHIP 33PF 5% 50V C386 1-163-239-11 s CERAMIC, CHIP 33PF 5% 50V C387 1-163-239-11 s CERAMIC, CHIP 33PF 5% 50V	C536 1-163-251-11 s CERAMIC, CHIP 100PF 5% 50V C537 1-163-275-11 s CERAMIC, CHIP 0.001uF 5% 50V C539 1-163-235-11 s CERAMIC, CHIP 22PF 5% 50V C540 1-163-275-11 s CERAMIC, CHIP 0.001uF 5% 50V C541 1-164-232-11 s CERAMIC 0.01uF 10% 100V
C388 1-163-121-00 s CERAMIC, CHIP 150PF 5% 50V C401 1-163-222-11 s CERAMIC, CHIP 5PF 50V C402 1-163-222-11 s CERAMIC, CHIP 5PF 50V C404 1-163-227-11 s CERAMIC, CHIP 10PF 5% 50V C405 1-126-394-11 s ELECT, CHIP 10UF 20% 16V	C542 1-126-398-11 s ELECT, CHIP 4.7uF 20% 35V C543 1-163-089-00 s CERAMIC, CHIP 6PF 50V C544 1-163-275-11 s CERAMIC, CHIP 0.001uF 5% 50V C545 1-163-275-11 s CERAMIC, CHIP 0.001uF 5% 50V C546 1-163-275-11 s CERAMIC, CHIP 0.001uF 5% 50V
C406 1-126-396-11 s ELECT, CHIP 47uF 20% 16V C407 1-162-638-11 s CERAMIC, CHIP 1uF 16V C409 1-126-396-11 s ELECT, CHIP 47uF 20% 16V C410 1-126-392-11 s ELECT, CHIP 100uF 20% 6.3V C411 1-126-392-11 s ELECT, CHIP 100uF 20% 6.3V	C547 1-163-227-11 s CERAMIC, CHIP 10PF 5% 50V C548 1-126-394-11 s ELECT, CHIP 10UF 20% 16V C560 1-126-392-11 s ELECT, CHIP 100UF 20% 6.3V C563 1-126-398-11 s ELECT, CHIP 4.7UF 20% 35V C565 1-164-232-11 s CERAMIC 0.01UF 10% 100V
C412 1-126-392-11 s ELECT, CHIP 100uF 20% 6.3V C413 1-162-638-11 s CERAMIC, CHIP 1uF 16V C418 1-163-133-00 s CERAMIC, CHIP 470PF 5% 50V C419 1-126-394-11 s ELECT, CHIP 10uF 20% 16V	C566 1-126-392-11 s ELECT, CHIP 100uF 20% 6.3V C571 1-163-227-11 s CERAMIC, CHIP 10PF 5% 50V C572 1-163-235-11 s CERAMIC, CHIP 22PF 5% 50V C575 1-163-227-11 s CERAMIC, CHIP 10PF 5% 50V

DFS-500/50 3

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(AD-76P BOARD used for DFS-500P)
(AD-76P BOARD used for DFS-500P)
                                                                                                                                                                                                          Ref. No. or Q'ty Part No.
                                                                                                                                                                                                                                                                             SP Description
or Q'ty Part No.
                                                                   SP Description
                            1-163-235-11 s CERAMIC, CHIP 22PF 5% 50V
1-163-239-11 s CERAMIC, CHIP 33PF 5% 50V
                                                                                                                                                                                                                                       1-126-396-11 s ELECT, CHIP 47UF 20% 16V
1-163-087-00 s CERAMIC, CHIP 4PF 50V
1-163-235-11 s CERAMIC, CHIP 22PF 5% 50V
1-163-235-11 s CERAMIC, CHIP 22PF 5% 50V
1-104-601-21 s ELECT 10UF 20% 10V
 C576
                                                                                                                                                                                                           C704
C585
                                                                                                                                                                                                           C720
 C586
                                                                                                                                                                                                           C740
 C587
                                                                                                                                                                                                           C751
                                                                                                                                                                                                                                       1-104-601-21 s ELECT 10uF 20% 10V

1-126-396-11 s ELECT, CHIP 47uF 20% 16V

1-126-394-11 s ELECT, CHIP 10uF 20% 16V

1-126-396-11 s ELECT, CHIP 47uF 20% 16V

1-126-392-11 s ELECT, CHIP 100uF 20% 6.3V
                            1-163-239-11 s CERAMIC, CHIP 33PF 5% 50V
1-163-121-00 s CERAMIC, CHIP 150PF 5% 50V
1-163-251-11 s CERAMIC, CHIP 100PF 5% 50V
1-126-394-11 s ELECT, CHIP 10UF 20% 16V
1-163-235-11 s CERAMIC, CHIP 22PF 5% 50V
                                                                                                                                                                                                           C752
 C589
C590
C592
                                                                                                                                                                                                           C753
                                                                                                                                                                                                           C756
                                                                                                                                                                                                           C757
 C593
                                                                                                                                                                                                           C759
 C594
                                                                                                                                                                                                                                       1-162-638-11 s CERAMIC, CHIP 1uF 16V
1-126-392-11 s ELECT, CHIP 100uF 20% 6.3V
1-162-638-11 s CERAMIC, CHIP 1uF 16V
1-162-638-11 s CERAMIC, CHIP 1uF 16V
1-104-601-21 s ELECT 10uF 20% 10V
                             1-126-392-11 s ELECT, CHIP 100uF 20% 6.3V
1-126-394-11 s ELECT, CHIP 10uF 20% 16V
1-126-394-11 s ELECT, CHIP 10uF 20% 16V
1-162-638-11 s CERAMIC, CHIP 1uF 16V
1-162-638-11 s CERAMIC, CHIP 1uF 16V
                                                                                                                                                                                                           C760
 C595
                                                                                                                                                                                                           C763
 C601
                                                                                                                                                                                                            C764
 C602
                                                                                                                                                                                                            C765
 C607
                                                                                                                                                                                                           C766
 C608
                                                                                                                                                                                                                                        1-104-601-21 s ELECT 10uF 20% 10V
1-126-394-11 s ELECT, CHIP 10uF 20% 16V
1-126-396-11 s ELECT, CHIP 47uF 20% 16V
1-126-392-11 s ELECT, CHIP 100uF 20% 6.3V
1-162-638-11 s CERAMIC, CHIP 1uF 16V
                             1-126-396-11 s ELECT, CHIP 47uF 20% 16V
1-126-392-11 s ELECT, CHIP 100uF 20% 6.3V
1-163-251-11 s CERAMIC, CHIP 100PF 5% 50V
1-163-275-11 s CERAMIC, CHIP 0.001uF 5% 50V
1-162-638-11 s CERAMIC, CHIP 1uF 16V
                                                                                                                                                                                                           C767
 C610
                                                                                                                                                                                                           C770
 C621
                                                                                                                                                                                                           C771
 C623
                                                                                                                                                                                                            C773
 C624
                                                                                                                                                                                                            C774
 C625
                              1-164-005-11 s CERAMIC, CHIP 0.47uF 25V

1-162-638-11 s CERAMIC, CHIP 1uF 16V

1-163-035-00 s CERAMIC, CHIP 0.047uF 50V

1-163-035-00 s CERAMIC, CHIP 0.047uF 50V

1-162-638-11 s CERAMIC, CHIP 1uF 16V
                                                                                                                                                                                                           C777
                                                                                                                                                                                                                                         1-126-392-11 s ELECT, CHIP 100uF 20% 6.3V
                                                                                                                                                                                                                                        1-120-392-11 S ELECT, CHIP 1004F 20X

1-162-638-11 S CERAMIC, CHIP 1uF 16V

1-162-638-11 S CERAMIC, CHIP 1uF 16V

1-104-601-21 S ELECT 10uF 20X 10V

1-104-601-21 S ELECT 10uF 20X 10V
                                                                                                                                                                                                           C778
C779
C786
 C627
 C628
  C629
                                                                                                                                                                                                           C787
  C630
                              1-126-392-11 s ELECT, CHIP 1000F 20% 6.3V 1-126-396-11 s ELECT, CHIP 470F 20% 16V 1-163-251-11 s CERAMIC, CHIP 100PF 5% 50V 1-163-275-11 s CERAMIC, CHIP 0.0010F 5% 50V 1-163-235-11 s CERAMIC, CHIP 22PF 5% 50V
                                                                                                                                                                                                                                        1-126-394-11 s ELECT, CHIP 10uF 20% 16V
1-126-396-11 s ELECT, CHIP 47uF 20% 16V
1-126-392-11 s ELECT, CHIP 100uF 20% 6.3V
1-162-638-11 s CERAMIC, CHIP 1uF 16V
1-126-392-11 s ELECT, CHIP 100uF 20% 6.3V
                                                                                                                                                                                                           C790
  C631
                                                                                                                                                                                                           C791
  C634
                                                                                                                                                                                                           C793
  C636
                                                                                                                                                                                                            C794
  C637
                                                                                                                                                                                                           C797
  C639
                              1-163-275-11 s CERAMIC, CHIP 0.001uF 5% 50V
1-164-232-11 s CERAMIC 0.01uF 10% 100V
1-126-398-11 s ELECT, CHIP 4.7uF 20% 35V
1-163-089-00 s CERAMIC, CHIP 6PF 50V
1-163-275-11 s CERAMIC, CHIP 0.001uF 5% 50V
                                                                                                                                                                                                                                        1-162-638-11 s CERAMIC, CHIP 1uF 16V
1-162-638-11 s CERAMIC, CHIP 1uF 16V
1-162-638-11 s CERAMIC, CHIP 1uF 16V
1-126-396-11 s ELECT, CHIP 47uF 20% 16V
1-126-396-11 s ELECT, CHIP 47uF 20% 16V
                                                                                                                                                                                                           C798
 C640
                                                                                                                                                                                                            C799
 C641
                                                                                                                                                                                                            C801
  C642
                                                                                                                                                                                                           C802
  C643
                                                                                                                                                                                                           C803
  C644
                                                                                                                                                                                                                                        1-163-087-00 s CERAMIC, CHIP 4PF 50V

1-163-235-11 s CERAMIC, CHIP 22PF 5% 50V

1-163-235-11 s CERAMIC, CHIP 22PF 5% 50V

1-104-601-21 s ELECT 10uF 20% 10V

1-104-601-21 s ELECT 10uF 20% 10V
                              1-163-275-11 s CERAMIC, CHIP 0.001uF 5% 50V

1-163-275-11 s CERAMIC, CHIP 0.001uF 5% 50V

1-163-227-11 s CERAMIC, CHIP 10PF 5% 50V

1-126-394-11 s ELECT, CHIP 10uF 20% 16V

1-126-392-11 s ELECT, CHIP 100uF 20% 6.3V
                                                                                                                                                                                                            C804
 C645
                                                                                                                                                                                                           C820
  C646
                                                                                                                                                                                                            C840
  C647
                                                                                                                                                                                                            C851
  C648
                                                                                                                                                                                                            C852
  C660
                              1-126-398-11 s ELECT, CHIP 4.7uF 20% 35V
1-164-232-11 s CERAMIC 0.01uF 10% 100V
1-126-392-11 s ELECT, CHIP 100uF 20% 6.3V
1-163-227-11 s CERAMIC, CHIP 10PF 5% 50V
1-163-235-11 s CERAMIC, CHIP 22PF 5% 50V
                                                                                                                                                                                                                                        1-126-396-11 s ELECT, CHIP 47uF 20% 16V
1-126-394-11 s ELECT, CHIP 10uF 20% 16V
1-126-396-11 s ELECT, CHIP 47uF 20% 16V
1-126-392-11 s ELECT, CHIP 100uF 20% 6.3V
1-162-638-11 s CERAMIC, CHIP 1uF 16V
                                                                                                                                                                                                            C853
  C663
                                                                                                                                                                                                            C856
 C665
                                                                                                                                                                                                           C857
C859
  C666
  C671
                                                                                                                                                                                                           C860
  C672
                                                                                                                                                                                                                                       1-126-392-11 s ELECT, CHIP 100uF 20% 6.3V 1-162-638-11 s CERAMIC, CHIP 1uF 16V 1-162-638-11 s CERAMIC, CHIP 1uF 16V 1-104-601-21 s ELECT 10uF 20% 10V 1-104-601-21 s ELECT 10uF 20% 10V
                              1-163-227-11 S CERAMIC, CHIP 10PF 5% 50V
1-163-235-11 S CERAMIC, CHIP 22PF 5% 50V
1-163-239-11 S CERAMIC, CHIP 33PF 5% 50V
1-163-239-11 S CERAMIC, CHIP 33PF 5% 50V
1-163-239-11 S CERAMIC, CHIP 33PF 5% 50V
                                                                                                                                                                                                            C863
                                                                                                                                                                                                            C864
  C676
                                                                                                                                                                                                           C865
  C685
                                                                                                                                                                                                           C866
  C686
                                                                                                                                                                                                           C867
  C687
                                                                                                                                                                                                                                       1-126-394-11 s ELECT, CHIP 10uF 20% 16V
1-126-396-11 s ELECT, CHIP 47uF 20% 16V
1-126-392-11 s ELECT, CHIP 100uF 20% 6.3V
1-162-638-11 s CERAMIC, CHIP 1uF 16V
1-126-392-11 s ELECT, CHIP 100uF 20% 6.3V
                              1-163-239-11 s CERAMIC, CHIP 33PF 5% 50V
1-163-239-11 s CERAMIC, CHIP 33PF 5% 50V
1-163-121-00 s CERAMIC, CHIP 150PF 5% 50V
1-163-251-11 s CERAMIC, CHIP 100PF 5% 50V
1-126-394-11 s ELECT, CHIP 10uF 20% 16V
                                                                                                                                                                                                           C870
  C688
                                                                                                                                                                                                           C871
 C689
                                                                                                                                                                                                           C873
  C690
                                                                                                                                                                                                           C874
  C692
                                                                                                                                                                                                           C877
  C693
                                                                                                                                                                                                                                       1-162-638-11 s CERAMIC, CHIP 1uF 16V
1-162-638-11 s CERAMIC, CHIP 1uF 16V
1-104-601-21 s ELECT 10uF 20% 10V
1-104-601-21 s ELECT 10uF 20% 10V
                              1-163-235-11 s CERAMIC, CHIP 22PF 5% 50V
1-126-392-11 s ELECT, CHIP 100uF 20% 6.3V
1-162-638-11 s CERAMIC, CHIP 1uF 16V
1-126-396-11 s ELECT, CHIP 47uF 20% 16V
                                                                                                                                                                                                           C878
 C694
 C695
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 C701
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 C702
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(AD-76P BOARD used for DFS-500P)
(AD-76P BOARD used for DFS-500P)
                                                                                                                                                          Ref. No.
Ref. No. or Q'ty Part No. SP Description
                                                                                                                                                          or Q'ty Part No.
                                                                                                                                                                                                             SP Description
                      1-126-394-11 s ELECT, CHIP 10uF 20% 16V
1-126-396-11 s ELECT, CHIP 47uF 20% 16V
1-126-392-11 s ELECT, CHIP 100uF 20% 6.3V
1-162-638-11 s CERAMIC, CHIP 1uF 16V
1-126-392-11 s ELECT, CHIP 100uF 20% 6.3V
                                                                                                                                                                               1-164-232-11 s CERAMIC 0.01uF 10% 100V
1-163-133-00 s CERAMIC, CHIP 470FF 5% 50V
1-163-224-11 s CERAMIC 7PF 0.25PF 50V
1-164-232-11 s CERAMIC 0.01uF 10% 100V
1-163-275-11 s CERAMIC, CHIP 0.001uF 5% 50V
C890
                                                                                                                                                          C1061
C1062
C891
C893
                                                                                                                                                          C1063
C894
                                                                                                                                                          C1065
C897
                      1-162-638-11 s CERAMIC, CHIP 1UF 16V
1-162-638-11 s CERAMIC, CHIP 1UF 16V
1-162-638-11 s CERAMIC, CHIP 1UF 16V
1-126-394-11 s ELECT, CHIP 10UF 20% 16V
1-163-251-11 s CERAMIC, CHIP 100PF 5% 50V
                                                                                                                                                                                1-163-239-11 s CERAMIC, CHIP 33PF 5% 50V
                                                                                                                                                          C1068
C898
C899
                                                                                                                                                                               1-506-748-11 o CONNECTOR, DIN 96P, MALE
1-506-748-11 o CONNECTOR, DIN 96P, MALE
1-506-748-11 o CONNECTOR, DIN 96P, MALE
                                                                                                                                                          CN19
 C901
                                                                                                                                                          CN20
 C902
                                                                                                                                                          CN21
 C908
                      1-163-251-11 s CERAMIC, CHIP 100PF 5% 50V
1-126-392-11 s ELECT, CHIP 100UF 20% 6.3V
1-163-251-11 s CERAMIC, CHIP 100PF 5% 50V
1-163-275-11 s CERAMIC, CHIP 0.001UF 5% 50V
1-163-251-11 s CERAMIC, CHIP 100PF 5% 50V
                                                                                                                                                                                1-141-229-00 s CAP, TRIMMER 7PF
1-141-229-00 s CAP, TRIMMER 7PF
                                                                                                                                                           CV101
 C909
                                                                                                                                                           CV201
 C911
 C915
                                                                                                                                                                                8-719-104-34 s DIODE 1S2835
                                                                                                                                                           D101
 C916
                                                                                                                                                          D102
D103
 C918
                      1-163-251-11 s CERAMIC, CHIP 100PF 5% 50V

1-164-004-11 s CERAMIC, CHIP 0.1uF 10% 25V

1-126-392-11 s ELECT, CHIP 100uF 20% 6.3V

1-163-275-11 s CERAMIC, CHIP 0.001uF 5% 50V

1-163-227-11 s CERAMIC, CHIP 10PF 5% 50V
 C919
                                                                                                                                                           D106
                                                                                                                                                           D107
 C922
 C923
                                                                                                                                                                                8-719-104-34 s DIODE 1S2835
8-719-104-34 s DIODE 1S2835
                                                                                                                                                           D111
  C927
                                                                                                                                                           D112
  C930
                                                                                                                                                                                8-719-104-34 S DIODE 152835
8-719-104-34 S DIODE 152835
8-719-104-34 S DIODE 152835
8-719-104-34 S DIODE 152835
                                                                                                                                                          D113
                       1-163-235-11 s CERAMIC, CHIP 22PF 5% 50V

1-164-004-11 s CERAMIC, CHIP 0.1uF 10% 25V

1-164-004-11 s CERAMIC, CHIP 0.1uF 10% 25V

1-163-251-11 s CERAMIC, CHIP 100PF 5% 50V

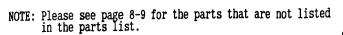
1-126-396-11 s ELECT, CHIP 47uF 20% 16V
                                                                                                                                                           D121
                                                                                                                                                          D122
 C944
  C945
                                                                                                                                                           D123
                                                                                                                                                                                 8-719-105-57 s DIODE RD3.9M-B1
  C946
                                                                                                                                                           D124
                                                                                                                                                                                 8-719-157-23 s DIODE RD4.7M-B
  C952
                                                                                                                                                          D125
D126
                                                                                                                                                                                8-719-915-43 s DIODE, VARICAP FC54M
8-719-915-43 s DIODE, VARICAP FC54M
8-719-104-34 s DIODE 1S2835
                       1-163-137-00 s CERAMIC, CHIP 680PF 5% 50V
1-164-232-11 s CERAMIC 0.01uF 10% 100V
  C953
                                                                                                                                                           D201
  C954
                       1-126-396-11 s ELECT, CHIP 47uF 20% 16V
1-126-394-11 s ELECT, CHIP 10uF 20% 16V
1-164-005-11 s CERAMIC, CHIP 0.47uF 25V
  C955
                                                                                                                                                           D202
                                                                                                                                                                                 8-719-104-34 s DIODE 1S2835
   C956
                                                                                                                                                                                 8-719-104-34 s DIODE 1S2835
8-719-104-34 s DIODE 1S2835
                                                                                                                                                           D203
   C957
                                                                                                                                                           D206
                       1-164-232-11 s CERAMIC 0.01uF 10% 100V
1-163-133-00 s CERAMIC, CHIP 470PF 5% 50V
1-163-224-11 s CERAMIC 7PF 0.25PF 50V
1-164-232-11 s CERAMIC 0.01uF 10% 100V
1-163-275-11 s CERAMIC, CHIP 0.001uF 5% 50V
                                                                                                                                                                                 8-719-104-34 s DIODE 1S2835
8-719-104-34 s DIODE 1S2835
                                                                                                                                                           D207
   C958
                                                                                                                                                           D211
   C961
   C962
                                                                                                                                                                                8-719-104-34 s DIODE 1S2835
8-719-104-34 s DIODE 1S2835
8-719-104-34 s DIODE 1S2835
8-719-104-34 s DIODE 1S2835
                                                                                                                                                           D212
   C963
                                                                                                                                                           D213
   C965
                                                                                                                                                           D221
                        1-163-239-11 s CERAMIC, CHIP 33PF 5% 50V

1-162-638-11 s CERAMIC, CHIP 1uF 16V

1-126-394-11 s ELECT, CHIP 10uF 20% 16V

1-163-251-11 s CERAMIC, CHIP 100PF 5% 50V

1-163-251-11 s CERAMIC, CHIP 100PF 5% 50V
                                                                                                                                                           D222
   C968
                                                                                                                                                           D223
                                                                                                                                                                                 8-719-105-57 s DIODE RD3.9M-B1
   C1001
   C1002
                                                                                                                                                           D224
                                                                                                                                                                                 8-719-157-23 s DIODE RD4.7M-B
   C1008
                                                                                                                                                                                8-719-915-43 s DIODE, VARICAP FC54M
8-719-915-43 s DIODE, VARICAP FC54M
8-719-104-34 s DIODE, 1S2835
                                                                                                                                                           D225
   C1009
                                                                                                                                                           D226
                        1-126-392-11 s ELECT, CHIP 100uF 20% 6.3V 1-163-251-11 s CERAMIC, CHIP 100PF 5% 50V 1-163-275-11 s CERAMIC, CHIP 0.001uF 5% 50V 1-163-251-11 s CERAMIC, CHIP 100PF 5% 50V 1-163-251-11 s CERAMIC, CHIP 100PF 5% 50V
                                                                                                                                                           D301
   C1011
   C1015
                                                                                                                                                           DL101
                                                                                                                                                                                 1-415-348-21 s DELAY LINE 280NS
   C1016
                                                                                                                                                                                1-415-309-00 s DELAY LINE 350nS
1-415-348-21 s DELAY LINE 280NS
1-415-348-21 s DELAY LINE 280NS
                                                                                                                                                           DL102
   C1018
                                                                                                                                                           DL103
   C1019
                                                                                                                                                           DL201
                        1-164-004-11 s CERAMIC, CHIP 0.1uF 10% 25V
1-126-392-11 s ELECT, CHIP 100uF 20% 6.3V
1-163-275-11 s CERAMIC, CHIP 0.001uF 5% 50V
1-163-227-11 s CERAMIC, CHIP 10PF 5% 50V
1-163-235-11 s CERAMIC, CHIP 22PF 5% 50V
                                                                                                                                                           DL202
                                                                                                                                                                                 1-415-309-00 s DELAY LINE 350nS
   C1022
   C1023
                                                                                                                                                           DL203
                                                                                                                                                                                 1-415-348-21 s DELAY LINE 280NS
   C1027
   C1030
                                                                                                                                                                                1-239-085-11 s FILTER, LOW-PASS
1-239-085-11 s FILTER, LOW-PASS
1-239-085-11 s FILTER, LOW-PASS
1-235-758-11 s FILTER, LOW-PASS
1-235-758-11 s FILTER, LOW-PASS
                                                                                                                                                           FL101
   C1039
                                                                                                                                                           FL102
                        1-164-004-11 s CERAMIC, CHIP 0.1uF 10% 25V
1-164-004-11 s CERAMIC, CHIP 0.1uF 10% 25V
1-163-275-11 s CERAMIC, CHIP 0.001uF 5% 50V
1-126-396-11 s ELECT, CHIP 47uF 20% 16V
1-163-137-00 s CERAMIC, CHIP 680PF 5% 50V
                                                                                                                                                           FL103
   C1044
                                                                                                                                                           FL111
   C1045
                                                                                                                                                           FL112
   C1046
   C1052
                                                                                                                                                                                1-239-085-11 s FILTER, LOW-PASS
1-235-758-11 s FILTER, LOW-PASS
                                                                                                                                                           FI.113
                                                                                                                                                           FL114
                                                                                                                                                                                1-235-758-11 s FILTER, LOW-PASS
1-239-085-11 s FILTER, LOW-PASS
1-239-085-11 s FILTER, LOW-PASS
                         1-164-232-11 s CERAMIC 0.01uF 10% 100V
                                                                                                                                                           FL115
   C1054
                        1-126-396-11 s ELECT, CHIP 47uF 20% 16V
1-126-394-11 s ELECT, CHIP 10uF 20% 16V
1-164-005-11 s CERAMIC, CHIP 0.47uF 25V
                                                                                                                                                           FL201
   C1055
   C1056
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(AD-76P BOARD used for DFS-500P)	(AD-76P BOARD used for DFS-500P)
Ref. No. or Q'ty Part No. SP Description	Ref. No. or Q'ty Part No. SP Description
FL203 1-239-085-11 s FILTER, LOW-PASS FL211 1-235-758-11 s FILTER, LOW-PASS FL212 1-235-758-11 s FILTER, LOW-PASS FL213 1-239-085-11 s FILTER, LOW-PASS FL214 1-235-758-11 s FILTER, LOW-PASS	IC149 8-759-926-82 s IC SN74HC574ANS IC150 8-759-926-82 s IC SN74HC574ANS IC151 8-759-710-29 s IC NJM2235M IC152 8-759-980-04 s IC LM311PS IC153 8-759-987-27 s IC LM1881M
FL215 1-235-758-11 s FILTER, LOW-PASS IC1 8-759-231-53 s IC TA7805S IC2 8-759-520-06 s IC NJM7809FA IC3 8-759-520-06 s IC NJM7809FA	IC154 8-759-239-58 S IC TC74HC221AF IC155 8-759-239-58 S IC TC74HC221AF IC156 8-759-927-46 S IC SN74HC00NS IC157 8-759-239-58 S IC TC74HC221AF IC158 8-759-926-24 S IC SN74HC164NS
IC4 8-759-701-87 s IC NJM7909FA IC101 8-759-710-29 s IC NJM2235M IC102 8-759-710-62 s IC NJM2246M IC103 8-759-710-29 s IC NJM2235M IC104 8-759-710-62 s IC NJM2246M	IC159 8-759-925-90 S IC SN74HC74NS IC160 8-759-925-90 S IC SN74HC74NS IC161 8-759-927-46 S IC SN74HC00NS IC162 8-759-927-46 S IC SN74HC00NS IC163 8-759-925-90 S IC SN74HC74NS
IC105 8-759-710-07 s IC NJM2234M IC106 8-759-711-32 s IC NJM2234M IC107 8-759-710-29 s IC NJM2235M IC108 8-759-710-62 s IC NJM2235M IC109 8-759-710-07 s IC NJM2246M IC110 8-759-711-32 s IC NJM2245M IC111 8-759-710-07 s IC NJM2234M IC112 8-759-711-32 s IC NJM2234M IC113 8-759-711-32 s IC NJM2234M IC114 8-759-925-74 s IC TC74HC04NS IC114 8-759-926-99 s IC SN74HC4075NS IC115 8-759-928-99 s IC SN74HC4075NS	IC164 8-759-926-23 S IC SN74HC163NS IC165 8-759-926-23 S IC SN74HC163NS IC166 8-759-926-23 S IC SN74HC163NS IC167 8-759-925-74 S IC TC74HC04NS IC168 8-759-925-81 S IC SN74HC20ANS
IC110 8-759-711-32 s IC NJM2245M IC111 8-759-710-07 s IC NJM2234M IC112 8-759-711-32 s IC NJM2245M IC113 8-759-925-74 s IC TC74HC04NS IC114 8-759-926-99 s IC SN74HC4075NS IC115 8-759-926-99 s IC SN74HC4075NS	IC169 8-759-927-46 S IC SN74HC00NS IC170 8-759-925-78 S IC SN74HC10NS IC171 8-759-239-58 S IC TC74HC221AF IC172 8-759-926-29 S IC SN74HC175NS IC173 8-759-926-24 S IC SN74HC164NS
IC116 8-759-925-85 s IC SN74HC32NS IC117 8-759-925-82 s IC SN74HC21NS IC118 8-759-925-85 s IC SN74HC32NS	IC174 8-759-927-46 s IC SN74HC00NS IC175 8-759-239-58 s IC TC74HC221AF IC176 8-749-901-21 s IC BX1461 IC177 8-759-908-17 s IC TL082CPS
IC121 8-759-925-74 s IC TC74HC04NS IC122 8-752-334-55 s IC CXD1175M IC123 8-752-342-61 s IC CXD2105AQ IC124 8-759-710-29 s IC NJM2235M	IC179 8-759-926-03 s IC SN74HC113NS IC201 8-759-710-29 s IC NJM2235M IC202 8-759-710-62 s IC NJM2246M IC203 8-759-710-29 s IC NJM2235M IC204 8-759-710-62 s IC NJM2246M
IC125 8-759-710-07 s IC NJM2234M IC126 8-759-987-27 s IC LM1881M IC127 8-759-111-69 s IC UPC1037HA IC128 8-759-234-77 s IC TC4566F IC129 8-759-983-69 s IC LM358PS IC130 8-759-925-90 s IC SN74HC74NS	IC205 8-759-710-07 s IC NJM2234M IC206 8-759-711-32 s IC NJM2245M IC207 8-759-710-29 s IC NJM2235M IC208 8-759-710-62 s IC NJM2234M IC209 8-759-710-07 s IC NJM2234M
IC131 8-759-239-58 s IC TC74HC221AF IC132 8-759-926-07 s IC SN74HC132NS IC133 8-759-710-29 s IC NJM2235M IC134 8-759-980-04 s IC LM311PS	IC210 8-759-711-32 S IC NJM2245M IC211 8-759-710-07 S IC NJM2234M IC212 8-759-711-32 S IC NJM2245M IC213 8-759-925-74 S IC TC74HC04NS IC214 8-759-926-99 S IC SN74HC4075NS
IC136 8-759-038-46 s IC TC7SOOF-TE85L IC137 8-759-603-54 s IC M51271FP IC138 8-759-710-86 s IC NJM2233BM-T1 IC139 8-759-710-86 s IC NJM2233BM-T1	IC215 8-759-926-99 S IC SN74HC4075NS IC216 8-759-925-85 S IC SN74HC32NS IC217 8-759-925-82 S IC SN74HC21NS IC218 8-759-925-85 S IC SN74HC32NS IC219 8-759-925-85 S IC SN74HC32NS
IC141 8-759-980-04 s IC LM311PS IC142 8-759-710-62 s IC NJM2246M IC143 8-759-711-32 s IC NJM2245M IC144 8-759-711-32 s IC NJM2245M	IC220 8-759-925-82 S IC SN74HC21NS IC222 8-752-334-55 S IC CXD1175M IC223 8-752-342-61 S IC CXD2105AQ IC224 8-759-710-29 S IC NJM2235M IC225 8-759-710-07 S IC NJM2234M
IC145 8-752-334-55 s IC CXD1175M IC146 8-752-334-55 s IC CXD1175M IC147 8-752-334-55 s IC CXD1175M IC148 8-759-926-82 s IC SN74HC574ANS	IC226 8-759-987-27 s IC LM1881M IC227 8-759-111-69 s IC UPC1037HA IC228 8-759-234-77 s IC TC4S66F IC229 8-759-983-69 s IC LM358PS

(AD-76P BOARD used	for DFS-500P)	(AD-76P	BOARD used for DFS-500P)
Ref. No. or Q'ty Part No.	SP Description	Ref. No.	Part No. SP Description
IC231 8-759-239- IC232 8-759-926- IC233 8-759-710-	-90 s IC SN74HC74NS -58 s IC TC74HC221AF -07 s IC SN74HC132NS -29 s IC NJM2235M -04 s IC LM311PS	L104 L105 L111 L112 L113	1-408-789-21 s INDUCTOR CHIP 100UH 1-408-793-21 s INDUCTOR CHIP 220UH 1-408-797-11 s INDUCTOR CHIP 470UH 1-408-785-21 s INDUCTOR CHIP 47UH 1-408-782-11 s INDUCTOR CHIP 27UH
IC235 8-759-239 IC236 8-759-038 IC237 8-759-603 IC238 8-759-710 IC239 8-759-710	-58 s IC TC74HC221AF -46 s IC TC7SOOF-TE85L -54 s IC M51271FP -86 s IC NJM2233BM-T1 -86 s IC NJM2233BM-T1	L114 L115 L116 L117 L118	1-408-785-21 s INDUCTOR CHIP 47UH 1-408-782-11 s INDUCTOR CHIP 27UH 1-408-785-21 s INDUCTOR CHIP 47UH 1-408-785-21 s INDUCTOR CHIP 47UH 1-408-785-21 s INDUCTOR CHIP 47UH
IC241 8-759-980 IC242 8-759-710 IC243 8-759-711	-07 s IC SN74HC132NS -04 s IC LM311PS -62 s IC NJM2246M -32 s IC NJM2245M -32 s IC NJM2245M	L121 L122 L123 L124 L125	1-408-785-21 s INDUCTOR CHIP 47UH 1-408-785-21 s INDUCTOR CHIP 47UH 1-408-785-21 s INDUCTOR CHIP 47UH 1-408-785-21 s INDUCTOR CHIP 47UH 1-408-785-21 s INDUCTOR CHIP 47UH
IC246 8-752-334 IC247 8-752-334 IC248 8-759-926	-55 s IC CXD1175M -55 s IC CXD1175M -55 s IC CXD1175M -82 s IC SN74HC574ANS -82 s IC SN74HC574ANS	L126 L131 L132 L201 L202	1-408-785-21 s INDUCTOR CHIP 47UH 1-408-793-21 s INDUCTOR CHIP 220UH 1-408-765-21 s INDUCTOR, CHIP 1uH 1-408-789-21 s INDUCTOR CHIP 100UH 1-408-785-21 s INDUCTOR CHIP 47UH
IC251 8-759-710 IC252 8-759-980 IC253 8-759-987	-82 s IC SN74HC574ANS -29 s IC NJM2235M -04 s IC LM311PS -27 s IC LM1881M -58 s IC TC74HC221AF	L203 L204 L205 L211 L212	1-408-785-21 s INDUCTOR CHIP 47UH 1-408-789-21 s INDUCTOR CHIP 100UH 1-408-793-21 s INDUCTOR CHIP 220UH 1-408-797-11 s INDUCTOR CHIP 470UH 1-408-785-21 s INDUCTOR CHIP 47UH
IC256 8-759-927 IC257 8-759-239 IC258 8-759-926	1-58 S IC TC74HC221AF 1-46 S IC SN74HC00NS 1-58 S IC TC74HC221AF 1-24 S IC SN74HC164NS 1-90 S IC SN74HC74NS	L213 L214 L215 L216 L217	1-408-782-11 s INDUCTOR CHIP 27UH 1-408-785-21 s INDUCTOR CHIP 47UH 1-408-782-11 s INDUCTOR CHIP 27UH 1-408-785-21 s INDUCTOR CHIP 47UH 1-408-785-21 s INDUCTOR CHIP 47UH
IC261 8-759-927 IC262 8-759-927 IC263 8-759-925	i-90 s IC SN74HC74NS i-46 s IC SN74HC00NS i-46 s IC SN74HC00NS i-90 s IC SN74HC74NS i-23 s IC SN74HC163NS	L218 L221 L222 L223 L224	1-408-785-21 s INDUCTOR CHIP 47UH 1-408-785-21 s INDUCTOR CHIP 47UH 1-408-785-21 s INDUCTOR CHIP 47UH 1-408-785-21 s INDUCTOR CHIP 47UH 1-408-785-21 s INDUCTOR CHIP 47UH
IC266 8-759-926 IC267 8-759-925 IC268 8-759-925	1-23 S IC SN74HC163NS 1-23 S IC SN74HC163NS 1-74 S IC TC74HC04NS 1-81 S IC SN74HC20ANS 1-46 S IC SN74HC00NS	L225 L226 L231 L232 L301	1-408-785-21 s INDUCTOR CHIP 47UH 1-408-785-21 s INDUCTOR CHIP 47UH 1-408-793-21 s INDUCTOR CHIP 220UH 1-408-765-21 s INDUCTOR, CHIP 1UH 1-408-789-21 s INDUCTOR CHIP 10UH
IC271 8-759-239	i-78 s IC SN74HC10NS i-58 s IC TC74HC221AF i-29 s IC SN74HC175NS	LV101 LV201	1-410-286-11 s INDUCTOR, VAR 1uH 1-410-286-11 s INDUCTOR, VAR 1uH
IC273 8-759-926 IC274 8-759-927	G-24 s IC SN74HC164NS G-46 s IC SN74HC00NS	PS2 Z	\$\frac{1}{1}-532-637-00 s LINK, IC 1.0A \$\frac{1}{1}-532-605-00 s LINK, IC 0.4A \$\frac{1}{1}-532-637-00 s LINK, IC 1.0A
IC276 8-749-901 IC277 8-759-908 IC278 8-759-926	0-58 s IC TC74HC221AF 0-21 s IC BX1461 0-17 s IC TL082CPS 0-48 s IC SN74HC244NS 0-03 s IC SN74HC113NS	Q101 Q102 Q103 Q104 Q105	8-729-120-28 s TRANSISTOR 2SC1623-L5L6 8-729-120-28 s TRANSISTOR 2SC1623-L5L6 8-729-120-28 s TRANSISTOR 2SC1623-L5L6 8-729-116-64 s TRANSISTOR 2SK508-K51 8-729-216-22 s TRANSISTOR 2SA1162
IC302 8-759-925	2-08 s IC NJM360M -73 s IC SN74HCO3NS	Q106 Q107	8-729-120-28 s TRANSISTOR 2SC1623-L5L6 8-729-120-28 s TRANSISTOR 2SC1623-L5L6
L2 1-412-525 L3 1-412-525	i-31 s INDUCTOR 10uH i-31 s INDUCTOR 10uH i-31 s INDUCTOR 10uH	0108 0111 0112	8-729-120-28 s TRANSISTOR 2SC1623-L5L6 8-729-120-28 s TRANSISTOR 2SC1623-L5L6 8-729-120-28 s TRANSISTOR 2SC1623-L5L6
L102 1-408-785	1-21 S INDUCTOR CHIP 100UH 1-21 S INDUCTOR CHIP 47UH 1-21 S INDUCTOR CHIP 47UH	Q113 Q114 Q115	8-729-120-28 s TRANSISTOR 2SC1623-L5L6 8-729-120-28 s TRANSISTOR 2SC1623-L5L6 8-729-216-22 s TRANSISTOR 2SA1162





(AD-76P BOARD used for DFS-500P)	(AD-76P BOARD used for DFS-500P)
Ref. No. or Q'ty Part No. SP Description	Ref. No. or Q'ty Part No. SP Description
Q121 8-729-120-28 s TRANSISTOR 2SC1623-L5L6 Q122 8-729-120-28 s TRANSISTOR 2SC1623-L5L6 Q123 8-729-120-28 s TRANSISTOR 2SC1623-L5L6 Q124 8-729-120-28 s TRANSISTOR 2SC1623-L5L6 Q125 8-729-120-28 s TRANSISTOR 2SC1623-L5L6	Q233 8-729-120-28 S TRANSISTOR 2SC1623-L5L6 Q234 8-729-120-28 S TRANSISTOR 2SC1623-L5L6 Q235 8-729-120-28 S TRANSISTOR 2SC1623-L5L6 Q236 8-729-216-22 S TRANSISTOR 2SA1162 Q237 8-729-216-22 S TRANSISTOR 2SA1162
Q131 8-729-216-22 s TRANSISTOR 2SA1162 Q132 8-729-216-22 s TRANSISTOR 2SA1162 Q133 8-729-120-28 s TRANSISTOR 2SC1623-L5L6 Q134 8-729-120-28 s TRANSISTOR 2SC1623-L5L6 Q135 8-729-120-28 s TRANSISTOR 2SC1623-L5L6	Q238 8-729-120-28 S TRANSISTOR 2SC1623-L5L6 Q239 8-729-120-28 S TRANSISTOR 2SC1623-L5L6 Q240 8-729-120-28 S TRANSISTOR 2SC1623-L5L6 Q241 8-729-120-28 S TRANSISTOR 2SC1623-L5L6 Q251 8-729-120-28 S TRANSISTOR 2SC1623-L5L6
Q136 8-729-216-22 S TRANSISTOR 2SA1162 Q137 8-729-216-22 S TRANSISTOR 2SA1162 Q138 8-729-120-28 S TRANSISTOR 2SC1623-L5L6 Q139 8-729-120-28 S TRANSISTOR 2SC1623-L5L6 Q140 8-729-120-28 S TRANSISTOR 2SC1623-L5L6	Q252 8-729-120-28 S TRANSISTOR 2SC1623-L5L6 Q254 8-729-120-28 S TRANSISTOR 2SC1623-L5L6 Q255 8-729-120-28 S TRANSISTOR 2SC1623-L5L6 Q256 8-729-120-28 S TRANSISTOR 2SC1623-L5L6
Q141 8-729-120-28 s TRANSISTOR 2SC1623-L5L6 Q151 8-729-120-28 s TRANSISTOR 2SC1623-L5L6 Q152 8-729-120-28 s TRANSISTOR 2SC1623-L5L6 Q153 8-729-120-28 s TRANSISTOR 2SC1623-L5L6 Q154 8-729-120-28 s TRANSISTOR 2SC1623-L5L6	Q257 8-729-120-28 s TRANSISTOR 2SC1623-L5L6 Q258 8-729-120-28 s TRANSISTOR 2SC1623-L5L6 Q259 8-729-120-28 s TRANSISTOR 2SC1623-L5L6 Q260 8-729-120-28 s TRANSISTOR 2SC1623-L5L6 Q271 8-729-116-64 s TRANSISTOR 2SK508-K51
Q155 8-729-120-28 s TRANSISTOR 2SC1623-L5L6 Q156 8-729-120-28 s TRANSISTOR 2SC1623-L5L6 Q157 8-729-120-28 s TRANSISTOR 2SC1623-L5L6 Q158 8-729-120-28 s TRANSISTOR 2SC1623-L5L6 Q159 8-729-120-28 s TRANSISTOR 2SC1623-L5L6	
Q160 8-729-120-28 s TRANSISTOR 2SC1623-L5L6 Q171 8-729-116-64 s TRANSISTOR 2SK508-K51 Q172 8-729-216-22 s TRANSISTOR 2SA1162 Q173 8-729-120-28 s TRANSISTOR 2SC1623-L5L6 Q174 8-729-116-64 s TRANSISTOR 2SK508-K51	Q277 8-729-116-64 s TRANSISTOR 2SK508-K51 Q278 8-729-216-22 s TRANSISTOR 2SA1162 Q279 8-729-120-28 s TRANSISTOR 2SC1623-L5L6 Q280 8-729-216-22 s TRANSISTOR 2SA1162 Q291 8-729-120-28 s TRANSISTOR 2SC1623-L5L6
Q175 8-729-216-22 S TRANSISTOR 2SA1162 Q176 8-729-120-28 S TRANSISTOR 2SC1623-L5L6 Q177 8-729-116-64 S TRANSISTOR 2SK508-K51 Q178 8-729-216-22 S TRANSISTOR 2SA1162 Q179 8-729-120-28 S TRANSISTOR 2SC1623-L5L6	Q292 8-729-120-28 s TRANSISTOR 2SC1623-L5L6 Q293 8-729-120-28 s TRANSISTOR 2SC1623-L5L6 Q301 8-729-120-28 s TRANSISTOR 2SC1623-L5L6 Q302 8-729-120-28 s TRANSISTOR 2SC1623-L5L6 Q303 8-729-120-28 s TRANSISTOR 2SC1623-L5L6
Q180 8-729-216-22 s TRANSISTOR 2SA1162 Q191 8-729-120-28 s TRANSISTOR 2SC1623-L5L6 Q192 8-729-120-28 s TRANSISTOR 2SC1623-L5L6 Q193 8-729-120-28 s TRANSISTOR 2SC1623-L5L6 Q201 8-729-120-28 s TRANSISTOR 2SC1623-L5L6	Q304 8-729-116-64 s TRANSISTOR 2SK508-K51 Q305 8-729-216-22 s TRANSISTOR 2SA1162 Q306 8-729-120-28 s TRANSISTOR 2SC1623-L5L6 Q307 8-729-112-65 s TRANSISTOR 2SA1462-Y33
Q202 8-729-120-28 S TRANSISTOR 2SC1623-L5L6 Q203 8-729-120-28 S TRANSISTOR 2SC1623-L5L6 Q204 8-729-116-64 S TRANSISTOR 2SK508-K51 Q205 8-729-216-22 S TRANSISTOR 2SA1162 Q206 8-729-120-28 S TRANSISTOR 2SC1623-L5L6	R1
Q207 8-729-120-28 s TRANSISTOR 2SC1623-L5L6 Q208 8-729-120-28 s TRANSISTOR 2SC1623-L5L6 Q211 8-729-120-28 s TRANSISTOR 2SC1623-L5L6 Q212 8-729-120-28 s TRANSISTOR 2SC1623-L5L6 Q213 8-729-120-28 s TRANSISTOR 2SC1623-L5L6	R12 1-216-695-11 s METAL, CHIP 68K 0.5% 1/10W R13 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W R14 1-216-691-11 s METAL, CHIP 47K 0.5% 1/10W R16 1-216-647-11 s METAL, CHIP 680 0.5% 1/10W R19 1-216-663-11 s METAL, CHIP 3.3K 0.5% 1/10W
Q214 8-729-120-28 S TRANSISTOR 2SC1623-L5L6 Q215 8-729-216-22 S TRANSISTOR 2SA1162 Q221 8-729-120-28 S TRANSISTOR 2SC1623-L5L6 Q222 8-729-120-28 S TRANSISTOR 2SC1623-L5L6 Q223 8-729-120-28 S TRANSISTOR 2SC1623-L5L6	R22 1-216-663-11 s METAL, CHIP 3.3K 0.5% 1/10W R23 1-216-691-11 s METAL, CHIP 47K 0.5% 1/10W R30 1-216-691-11 s METAL, CHIP 47K 0.5% 1/10W R32 1-216-679-11 s METAL, CHIP 15K 0.5% 1/10W R41 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W
Q224 8-729-120-28 s TRANSISTOR 2SC1623-L5L6 Q225 8-729-120-28 s TRANSISTOR 2SC1623-L5L6 Q231 8-729-216-22 s TRANSISTOR 2SA1162 Q232 8-729-216-22 s TRANSISTOR 2SA1162	R42 1-216-679-11 s METAL, CHIP 15K 0.5% 1/10W R47 1-216-679-11 s METAL, CHIP 15K 0.5% 1/10W R48 1-216-647-11 s METAL, CHIP 680 0.5% 1/10W R49 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W R105 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W

 $\ensuremath{\mathtt{NOTE}}\xspace$: Please see page 8-9 for the parts that are not listed in the parts list.

(AD-76P BOARD used for DFS-500P) (AD-76P BOARD used for DFS-500P) Ref. No. or Q'ty Part No. Ref. No. or Q'ty Part No. SP Description SP Description 1-216-669-11 s METAL, CHIP 5.6K 0.5% 1/10W 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W 1-216-611-11 s METAL, CHIP 22 0.5% 1/10W 1-216-611-11 s METAL, CHIP 22 0.5% 1/10W 1-216-663-11 s METAL, CHIP 3.3K 0.5% 1/10W 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W R106 R304 R107 R305 R108 R306 R109 R308 R115 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W 1-216-639-11 s METAL, CHIP 330 0.5% 1/10W 1-216-679-11 s METAL, CHIP 15K 0.5% 1/10W 1-216-673-11 s METAL, CHIP 8.2K 0.5% 1/10W 1-216-695-11 s METAL, CHIP 68K 0.5% 1/10W 1-216-663-11 s METAL, CHIP 3.3K 0.5% 1/10W R309 R116 R310 R117 R311 R118 R313 R119 R314 R125 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W 1-216-691-11 s METAL, CHIP 47K 0.5% 1/10W 1-216-687-11 s METAL, CHIP 33K 0.5% 1/10W 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W 1-216-679-11 s METAL, CHIP 15K 0.5% 1/10W 1-216-663-11 s METAL, CHIP 3.3K 0.5% 1/10W R315 R126 R316 R127 R318 R128 R319 R129 R320 R135 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W 1-216-603-11 s METAL, CHIP 10 0.5% 1/10W 1-216-623-11 s METAL, CHIP 68 0.5% 1/10W 1-216-655-11 s METAL, CHIP 1.5% 0.5% 1/10W 1-216-683-11 s METAL, CHIP 22% 0.5% 1/10W 1-216-683-11 s METAL, CHIP 22% 0.5% 1/10W 1-218-776-11 s METAL 1M 0.5% 1/10W R324 R136 R325 R137 R327 R138 R328 R139 R145 1-216-603-11 s METAL, CHIP 10 0.5% 1/10W 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W 1-216-603-11 s METAL, CHIP 10 0.5% 1/10W 1-216-637-11 s METAL, CHIP 270 0.5% 1/10W 1-216-663-11 s METAL, CHIP 3.3K 0.5% 1/10W 1-216-663-11 s METAL, CHIP 3.3K 0.5% 1/10W 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W R146 R336 R147 R337 R148 R338 R149 R339 R155 1-216-603-11 s METAL, CHIP 10 0.5% 1/10W 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W 1-216-669-11 s METAL, CHIP 5.6K 0.5% 1/10W 1-216-669-11 s METAL, CHIP 5.6K 0.5% 1/10W 1-216-671-11 s METAL, CHIP 6.8K 0.5% 1/10W 1-216-657-11 s METAL, CHIP 1.8K 0.5% 1/10W 1-218-772-11 s METAL 680K 0.5% 1/10W R342 R156 R346 R157 R349 R158 R350 R159 R356 R205 1-216-681-11 s METAL, CHIP 18K 0.5% 1/10W 1-216-663-11 s METAL, CHIP 3.3K 0.5% 1/10W 1-216-655-11 s METAL, CHIP 1.5K 0.5% 1/10W 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W 1-216-697-11 s METAL, CHIP 82K 0.5% 1/10W 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W R206 R359 R207 R361 R208 R362 R209 R365 R215 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W 1-216-691-11 s METAL, CHIP 47K 0.5% 1/10W 1-216-687-11 s METAL, CHIP 33K 0.5% 1/10W 1-216-683-11 s METAL, CHIP 22K 0.5% 1/10W 1-218-760-11 s METAL 220K 0.5% 1/10W R366 R216 R368 R217 R369 R218 R370 R219 1-216-655-11 s METAL, CHIP 1.5K 0.5% 1/10W R372 1-216-643-11 s METAL, CHIP 470 0.5% 1/10W 1-216-679-11 s METAL, CHIP 15% 0.5% 1/10W 1-216-697-11 s METAL, CHIP 82% 0.5% 1/10W 1-216-669-11 s METAL, CHIP 5.6% 0.5% 1/10W 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W R373 R227 R384 R389 R228 R402 R229 R404 R235 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W 1-216-603-11 s METAL, CHIP 10 0.5% 1/10W 1-216-611-11 s METAL, CHIP 22 0.5% 1/10W 1-216-611-11 s METAL, CHIP 22 0.5% 1/10W 1-216-663-11 s METAL, CHIP 3.3% 0.5% 1/10W 1-216-639-11 s METAL, CHIP 330 0.5% 1/10W 1-216-679-11 s METAL, CHIP 15% 0.5% 1/10W R405 R236 R406 R237 R408 R238 R409 R239 R410 1-216-673-11 s METAL, CHIP 8.2K 0.5% 1/10W 1-216-695-11 s METAL, CHIP 68K 0.5% 1/10W 1-216-663-11 s METAL, CHIP 3.3K 0.5% 1/10W 1-216-691-11 s METAL, CHIP 47K 0.5% 1/10W 1-216-687-11 s METAL, CHIP 33K 0.5% 1/10W 1-216-603-11 s METAL, CHIP 10 0.5% 1/10W 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W 1-216-603-11 s METAL, CHIP 10 0.5% 1/10W R411 R246 R247 R413 R414 R415 R248 R249 R416 R255 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W 1-216-679-11 s METAL, CHIP 15K 0.5% 1/10W 1-216-663-11 s METAL, CHIP 3.3K 0.5% 1/10W 1-216-603-11 s METAL, CHIP 10 0.5% 1/10W 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W R418 R256 R419 R257 R420 R258 1-216-623-11 s METAL, CHIP 68 0.5% 1/10W R424 R259

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(AD-76P BOARD used for DFS-500P)
(AD-76P BOARD used for DFS-500P)
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Ref. No. or Q'ty Part No.
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                                                                                    SP Description
                                   1-216-655-11 s METAL, CHIP 1.5K 0.5% 1/10W 1-216-683-11 s METAL, CHIP 22K 0.5% 1/10W 1-216-683-11 s METAL, CHIP 22K 0.5% 1/10W 1-218-776-11 s METAL CHIP 22K 0.5% 1/10W 1-218-776-11 s METAL CHIP 22K 0.5% 1/10W 1-216-827-11
                                                                                                                                                                                                                                                                                                   1-216-671-11 s METAL, CHIP 6.8K 0.5% 1/10W 1-216-671-11 s METAL, CHIP 6.8K 0.5% 1/10W 1-216-663-11 s METAL, CHIP 3.3K 0.5% 1/10W 1-218-776-11 s METAL 1M 0.5% 1/10W
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 R425
R427
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  R428
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  R430
                                     1-216-637-11 s METAL, CHIP 270 0.5% 1/10W
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                                                                                                                                                                                                                                                                                                    1-216-635-11 s METAL, CHIP 220 0.5% 1/10W
  R431
                                                                                                                                                                                                                                                                                                   1-216-697-11 s METAL, CHIP 82K 0.5% 1/10W 1-216-663-11 s METAL, CHIP 3.3K 0.5% 1/10W 1-218-764-11 s METAL 330K 0.5% 1/10W 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W
                                    1-216-663-11 s METAL, CHIP 3.3K 0.5% 1/10W 1-216-635-11 s METAL, CHIP 3.3K 0.5% 1/10W 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W 1-216-669-11 s METAL, CHIP 5.6K 0.5% 1/10W
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  R436
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 R437
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  R438
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  R439
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  R442
                                     1-216-669-11 S METAL, CHIP 5.6K 0.5% 1/10W 1-216-671-11 S METAL, CHIP 6.8K 0.5% 1/10W 1-216-657-11 S METAL, CHIP 1.8K 0.5% 1/10W 1-218-772-11 S METAL 680K 0.5% 1/10W
                                                                                                                                                                                                                                                                                                   1-216-643-11 s METAL, CHIP 470 0.5% 1/10W 1-218-760-11 s METAL 220K 0.5% 1/10W 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W 1-216-663-11 s METAL, CHIP 3.3K 0.5% 1/10W
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  R446
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  R449
  R450
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  R456
                                       1-216-681-11 s METAL, CHIP 18K 0.5% 1/10W
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  R457
                                      1-216-663-11 s METAL, CHIP 3.3K 0.5% 1/10W 1-216-655-11 s METAL, CHIP 1.5K 0.5% 1/10W 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W 1-216-697-11 s METAL, CHIP 82K 0.5% 1/10W 1-216-691-11 s METAL, CHIP 47K 0.5% 1/10W
                                                                                                                                                                                                                                                                                                    1-216-609-11 s METAL, CHIP 18 0.5% 1/10W 1-216-634-11 s METAL, CHIP 200 0.5% 1/10W 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W 1-216-649-11 s METAL, CHIP 820 0.5% 1/10W 1-216-663-11 s METAL, CHIP 3.3% 0.5% 1/10W
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   R459
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  R461
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  R462
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   R466
                                       1-216-687-11 s METAL, CHIP 33K 0.5% 1/10W 1-216-683-11 s METAL, CHIP 22K 0.5% 1/10W 1-218-760-11 s METAL 220K 0.5% 1/10W 1-216-655-11 s METAL, CHIP 1.5K 0.5% 1/10W 1-216-643-11 s METAL, CHIP 470 0.5% 1/10W
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                                                                                                                                                                                                                                                                 R624
   R468
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   R469
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R632
  R470
R472
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   R473
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                                       1-216-679-11 s METAL, CHIP 15K 0.5% 1/10W 1-216-697-11 s METAL, CHIP 82K 0.5% 1/10W 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W 1-216-643-11 s METAL, CHIP 470 0.5% 1/10W
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   R484
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   R489
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   R501
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   R502
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   R506
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                                        1-218-760-11 s METAL 220K 0.5% 1/10W
1-216-635-11 s METAL, CHIP 220 0.5% 1/10W
1-216-635-11 s METAL, CHIP 220 0.5% 1/10W
1-216-663-11 s METAL, CHIP 3.3K 0.5% 1/10W
1-216-609-11 s METAL, CHIP 18 0.5% 1/10W
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   R510
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   R513
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    R514
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    R515
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    R516
                                        1-216-634-11 s METAL, CHIP 200 0.5% 1/10W 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W 1-216-649-11 s METAL, CHIP 820 0.5% 1/10W 1-216-663-11 s METAL, CHIP 3.3% 0.5% 1/10W 1-216-663-11 s METAL, CHIP 3
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   R517
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1-216-671-11 S METAL, CHIP 6.8K 0.5% 1/10W

1-216-671-11 S METAL, CHIP 6.8K 0.5% 1/10W

1-216-649-11 S METAL, CHIP 820 0.5% 1/10W

1-216-663-11 S METAL, CHIP 3.3K 0.5% 1/10W
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    R518
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   R522
R523
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                                          1-216-671-11 s METAL, CHIP 6.8K 0.5% 1/10W
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    R524
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                                        1-216-653-11 s METAL, CHIP 1.2% 0.5% 1/10W 1-216-687-11 s METAL, CHIP 33% 0.5% 1/10W 1-216-689-11 s METAL, CHIP 39% 0.5% 1/10W 1-216-697-11 s METAL, CHIP 82% 0.5% 1/10W 1-216-673-11 s METAL, CHIP 8.2% 0.5% 1/10W
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     R526
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     R531
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     R534
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     R540
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                                         1-216-683-11 s METAL, CHIP 22K 0.5% 1/10W 1-218-768-11 s METAL 470K 0.5% 1/10W 1-216-619-11 s METAL, CHIP 47 0.5% 1/10W 1-216-639-11 s METAL, CHIP 330 0.5% 1/10W 1-216-685-11 s METAL, CHIP 27K 0.5% 1/10W
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    R541
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     R543
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     R544
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     R545
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                                          1-216-671-11 s METAL, CHIP 6.8K 0.5% 1/10W 1-216-671-11 s METAL, CHIP 6.8K 0.5% 1/10W 1-216-683-11 s METAL, CHIP 22K 0.5% 1/10W 1-216-663-11 s METAL, CHIP 3.3K 0.5% 1/10W 1-216-683-11 s METAL, CHIP 22K 0.5% 1/10W
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     R547
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     R548
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     R552
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     R553
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                                         1-216-671-11 s METAL, CHIP 6.8K 0.5% 1/10W 1-216-671-11 s METAL, CHIP 6.8K 0.5% 1/10W 1-216-649-11 s METAL, CHIP 820 0.5% 1/10W 1-216-663-11 s METAL, CHIP 3.3K 0.5% 1/10W
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     R558
    R560
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     R563
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     R566
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(AD-76P BOARD used for DFS-500P)	(AD-76P BOARD used for DFS-500P)	
Ref. No. or Q'ty Part No. SP Description	Ref. No. or Q'ty Part No. SP Description	
R729 1-216-663-11 s METAL, CHIP 3.3K 0.5% 1/10W R740 1-216-655-11 s METAL, CHIP 1.5K 0.5% 1/10W R743 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W R745 1-216-633-11 s METAL, CHIP 180 0.5% 1/10W R747 1-216-663-11 s METAL, CHIP 3.3K 0.5% 1/10W	R858 1-216-663-11 s METAL, CHIP 3.3K 0.5% 1/10W R859 1-216-671-11 s METAL, CHIP 6.8K 0.5% 1/10W R861 1-216-643-11 s METAL, CHIP 470 0.5% 1/10W R866 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W R867 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W	
R749 1-216-663-11 s METAL, CHIP 3.3K 0.5% 1/10W R751 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W R752 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W R753 1-216-643-11 s METAL, CHIP 470 0.5% 1/10W R754 1-216-691-11 s METAL, CHIP 47K 0.5% 1/10W		
R755 1-216-691-11 s METAL, CHIP 47K 0.5% 1/10W R756 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W R757 1-216-679-11 s METAL, CHIP 15K 0.5% 1/10W R758 1-216-663-11 s METAL, CHIP 3.3K 0.5% 1/10W R759 1-216-671-11 s METAL, CHIP 6.8K 0.5% 1/10W		
R761 1-216-643-11 s METAL, CHIP 470 0.5% 1/10W R766 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W R767 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W R768 1-216-691-11 s METAL, CHIP 220 0.5% 1/10W R769 1-216-689-11 s METAL, CHIP 47% 0.5% 1/10W	R889 1-216-689-11 s METAL, CHIP 39K 0.5% 1/10W R890 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W R891 1-216-679-11 s METAL, CHIP 15K 0.5% 1/10W R892 1-216-663-11 s METAL, CHIP 3.3K 0.5% 1/10W R893 1-216-663-11 s METAL, CHIP 3.3K 0.5% 1/10W	
R770 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W R771 1-216-679-11 s METAL, CHIP 15% 0.5% 1/10W R772 1-216-663-11 s METAL, CHIP 3.3% 0.5% 1/10W R773 1-216-663-11 s METAL, CHIP 3.3% 0.5% 1/10W R775 1-216-663-11 s METAL, CHIP 3.3% 0.5% 1/10W	R895 1-216-663-11 s METAL, CHIP 3.3K 0.5% 1/10W R898 1-216-679-11 s METAL, CHIP 15K 0.5% 1/10W R904 1-216-663-11 s METAL, CHIP 3.3K 0.5% 1/10W R905 1-216-663-11 s METAL, CHIP 3.3K 0.5% 1/10W R913 1-218-764-11 s METAL 330K 0.5% 1/10W	
R786 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W R787 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W R788 1-216-691-11 s METAL, CHIP 47% 0.5% 1/10W R789 1-216-689-11 s METAL, CHIP 39% 0.5% 1/10W R790 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W	R917 1-216-657-11 s METAL, CHIP 1.8K 0.5% 1/10W R919 1-218-772-11 s METAL 680K 0.5% 1/10W R920 1-216-687-11 s METAL, CHIP 33K 0.5% 1/10W R921 1-216-689-11 s METAL, CHIP 39K 0.5% 1/10W R924 1-216-669-11 s METAL, CHIP 5.6K 0.5% 1/10W	
R791 1-216-679-11 s METAL, CHIP 15K 0.5% 1/10W R792 1-216-663-11 s METAL, CHIP 3.3K 0.5% 1/10W R793 1-216-663-11 s METAL, CHIP 3.3K 0.5% 1/10W R795 1-216-663-11 s METAL, CHIP 3.3K 0.5% 1/10W R798 1-216-679-11 s METAL, CHIP 15K 0.5% 1/10W	R925 1-216-685-11 s METAL, CHIP 27K 0.5% 1/10W R936 1-216-679-11 s METAL, CHIP 15K 0.5% 1/10W R937 1-218-754-11 s METAL, CHIP 120K 0.50% 1/10W R941 1-216-677-11 s METAL, CHIP 12K 0.5% 1/10W R942 1-218-760-11 s METAL 220K 0.5% 1/10W	
R802 1-216-669-11 s METAL, CHIP 5.6K 0.5% 1/10W R804 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W R805 1-216-663-11 s METAL, CHIP 3.3K 0.5% 1/10W R806 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W R807 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W	R944 1-216-691-11 s METAL, CHIP 47K 0.5% 1/10W R949 1-216-683-11 s METAL, CHIP 22K 0.5% 1/10W R950 1-216-687-11 s METAL, CHIP 33K 0.5% 1/10W R951 1-216-683-11 s METAL, CHIP 22K 0.5% 1/10W R952 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W	
R811 1-216-663-11 s METAL, CHIP 3.3K 0.5% 1/10W R814 1-216-671-11 s METAL, CHIP 6.8K 0.5% 1/10W R820 1-216-655-11 s METAL, CHIP 1.5K 0.5% 1/10W R823 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W R825 1-216-633-11 s METAL, CHIP 180 0.5% 1/10W	R953 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W R954 1-218-760-11 s METAL 220K 0.5% 1/10W R955 1-218-764-11 s METAL 330K 0.5% 1/10W R956 1-216-623-11 s METAL, CHIP 68 0.5% 1/10W R957 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W	
R827 1-216-663-11 s METAL, CHIP 3.3K 0.5% 1/10W R829 1-216-663-11 s METAL, CHIP 3.3K 0.5% 1/10W R840 1-216-655-11 s METAL, CHIP 1.5K 0.5% 1/10W R843 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W R845 1-216-633-11 s METAL, CHIP 180 0.5% 1/10W	R958 1-216-623-11 s METAL, CHIP 68 0.5% 1/10W R1013 1-218-764-11 s METAL 330K 0.5% 1/10W R1017 1-216-657-11 s METAL, CHIP 1.8K 0.5% 1/10W R1019 1-218-772-11 s METAL 680K 0.5% 1/10W R1020 1-216-687-11 s METAL, CHIP 33K 0.5% 1/10W	
R847 1-216-663-11 s METAL, CHIP 3.3K 0.5% 1/10W R849 1-216-663-11 s METAL, CHIP 3.3K 0.5% 1/10W R851 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W R852 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W R853 1-216-643-11 s METAL, CHIP 470 0.5% 1/10W	R1021 1-216-689-11 s METAL, CHIP 39K 0.5% 1/10W R1024 1-216-669-11 s METAL, CHIP 5.6K 0.5% 1/10W R1025 1-216-685-11 s METAL, CHIP 27K 0.5% 1/10W R1036 1-216-679-11 s METAL, CHIP 15K 0.5% 1/10W R1037 1-218-754-11 s METAL, CHIP 120K 0.50% 1/10W	
R854 1-216-691-11 s METAL, CHIP 47K 0.5% 1/10W R855 1-216-691-11 s METAL, CHIP 47K 0.5% 1/10W R856 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W R857 1-216-679-11 s METAL, CHIP 15K 0.5% 1/10W	R1041 1-216-677-11 s METAL, CHIP 12K 0.5% 1/10W R1042 1-218-760-11 s METAL 22OK 0.5% 1/10W R1043 1-216-687-11 s METAL, CHIP 33K 0.5% 1/10W R1044 1-216-691-11 s METAL, CHIP 47K 0.5% 1/10W	



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CN-573 BOARD
(AD-76P BOARD used for DFS-500P)
                                                                                                                                                                                                                                           Ref. No. or Q'ty Part No.
Ref. No.
                                                                                                                                                                                                                                                                                                                        SP Description
or Q'ty Part No.
                                                                              SP Description
                                                                                                                                                                                                                                                                            A-8271-681-A O MOUNTED CIRCUIT BOARD, CN-573
3-178-137-01 O BRACKET, D-SUB
3-673-910-21 O SCREW, CONNECTOR
4-876-607-21 O COLLAR (E), PLATE, JACK
7-682-547-04 S SCREW +B 3X6
                                1-216-683-11 s METAL, CHIP 22K 0.5% 1/10W 1-216-687-11 s METAL, CHIP 33K 0.5% 1/10W 1-216-683-11 s METAL, CHIP 22K 0.5% 1/10W 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W
R1049
R1050
                                                                                                                                                                                                                                            1pc
                                                                                                                                                                                                                                             4pcs
 R1051
                                                                                                                                                                                                                                             2pcs
 R1052
                                                                                                                                                                                                                                            3pcs
 R1053
                                  1-218-760-11 s METAL 220K 0.5% 1/10W 1-218-764-11 s METAL 330K 0.5% 1/10W
                                                                                                                                                                                                                                                                              1-124-144-00 s ELECT 220uF 20% 16V
 R1054
                                                                                                                                                                                                                                                                              1-124-144-00 s ELECT 220uF 20% 16V
                                                                                                                                                                                                                                            C2
 R1055
                                  1-216-623-11 S METAL, CHIP 68 0.5% 1/10W
1-216-635-11 S METAL, CHIP 220 0.5% 1/10W
1-216-623-11 S METAL, CHIP 68 0.5% 1/10W
 R1056
                                                                                                                                                                                                                                                                            1-573-580-11 s CONNECTOR, BNC, FEMALE
1-573-580-11 s CONNECTOR, BNC, FEMALE
1-691-274-11 s CONNECTOR, BNC, FEMALE
1-695-807-11 s CONNECTOR, 2-BNC, FEMALE
1-695-807-11 s CONNECTOR, 2-BNC, FEMALE
  R1057
                                                                                                                                                                                                                                             CN4
  R1058
                                                                                                                                                                                                                                             CN6
                                  1-231-385-00 s RESISTOR BLOCK 4.7Kx8
                                                                                                                                                                                                                                             CN7
  RR1
                                                                                                                                                                                                                                             CN9
  RB2
  RB3
                                                                                                                                                                                                                                                                             1-573-590-12 S CONNECTOR, CIRCULAR 4P, FEMALE
1-573-589-11 S CONNECTOR, CIRCULAR 12P, MALE
  RB101
                                                                                                                                                                                                                                             CN12
  RB102
                                                                                                                                                                                                                                             CN13
                                    1-231-385-00 s RESISTOR BLOCK 4.7Kx8
                                                                                                                                                                                                                                             CN14
  RB103
                                                                                                                                                                                                                                             CN15
                                   1-228-993-00 s RES, ADJ METAL 4.7K
1-228-993-00 s RES, ADJ METAL 4.7K
1-228-994-00 s RES, ADJ METAL 10K
1-230-504-11 s RES, ADJ METAL 220
1-228-990-00 s RES, ADJ METAL 1K
  RV101
                                                                                                                                                                                                                                                                             1-573-589-11 s CONNECTOR, CIRCULAR 12P, MALE 1-573-589-11 s CONNECTOR, CIRCULAR 12P, MALE 1-573-589-11 s CONNECTOR, CIRCULAR 12P, MALE 1-568-676-11 o CONNECTOR, D-SUB 9P, FEMALE 1-568-677-11 o CONNECTOR, D-SUB 25PM, FEMALE
                                                                                                                                                                                                                                             CN16
  RV102
                                                                                                                                                                                                                                             CN17
   RV103
                                                                                                                                                                                                                                             CN18
   RV111
                                                                                                                                                                                                                                             CN21
   RV112
                                                                                                                                                                                                                                             CN22
                                    1-228-993-00 s RES, ADJ METAL 4.7K
1-228-989-00 s RES, ADJ METAL 470
1-228-989-00 s RES, ADJ METAL 470
1-228-990-00 s RES, ADJ METAL 1K
1-230-504-11 s RES, ADJ METAL 220
    RV113
                                                                                                                                                                                                                                                                              1-573-580-11 s CONNECTOR, BNC, FEMALE 1-573-580-11 s CONNECTOR, BNC, F
                                                                                                                                                                                                                                             CN23
    RV114
                                                                                                                                                                                                                                             CN25
    RV115
                                                                                                                                                                                                                                             CN27
    RV116
                                                                                                                                                                                                                                                                              1-573-580-11 s CONNECTOR, BNC, FEMALE
1-573-580-11 s CONNECTOR, BNC, FEMALE
                                                                                                                                                                                                                                             CN29
    RV-117
                                                                                                                                                                                                                                             CN31
                                    1-228-989-00 s RES, ADJ METAL 470
    RV118
                                                                                                                                                                                                                                                                              1-691-274-11 s CONNECTOR, BNC, FEMALE
1-695-807-11 s CONNECTOR, 2-BNC, FEMALE
1-573-590-12 s CONNECTOR, CIRCULAR 4P, FEMALE
1-573-590-12 s CONNECTOR, CIRCULAR 4P, FEMALE
1-573-592-11 s CONNECTOR, CIRCULAR 12P, FEMALE
                                                                                                                                                                                                                                               CN33
    RV119
                                                                                                                                                                                                                                              CN34
    RV121
                                                                                                                                                                                                                                               CN36
    RV122
                                                                                                                                                                                                                                               CN37
    RV123
                                                                                                                                                                                                                                               CN38
                                      1-228-993-00 s RES, ADJ METAL 4.7K
1-228-993-00 s RES, ADJ METAL 4.7K
    RV131
                                                                                                                                                                                                                                                                               1-573-592-11 s CONNECTOR, CIRCULAR 12P, FEMALE 1-506-482-11 s CONNECTOR 3P, MALE
                                                                                                                                                                                                                                               CN39
    RV 201
                                     1-228-993-00 s RES, ADJ METAL 4.7K
1-228-994-00 s RES, ADJ METAL 10K
1-230-504-11 s RES, ADJ METAL 220
                                                                                                                                                                                                                                             CN40
    RV 202
    RV 203
                                                                                                                                                                                                                                                                              1-412-525-31 s INDUCTOR 10uH
1-412-525-31 s INDUCTOR 10uH
    RV 211
                                                                                                                                                                                                                                               L2
                                      1-228-990-00 s RES, ADJ METAL 1K
                                      1-228-993-00 s RES, ADJ METAL 4.7K

1-228-989-00 s RES, ADJ METAL 470

1-228-989-00 s RES, ADJ METAL 470

1-228-990-00 s RES, ADJ METAL 470

1-228-990-00 s RES, ADJ METAL 1K
                                                                                                                                                                                                                                                                              1-215-394-00 s METAL 75 1% 1/6W
1-215-394-00 s METAL 75 1% 1/6W
1-215-394-00 s METAL 75 1% 1/6W
                                                                                                                                                                                                                                               R1
     RV213
                                                                                                                                                                                                                                               R2
     RV 214
                                                                                                                                                                                                                                               R3
     RV 215
     RV 216
                                                                                                                                                                                                                                                                              1-570-157-51 s SWITCH, SLIDE
1-570-157-51 s SWITCH, SLIDE
                                      1-230-504-11 s RES, ADJ METAL 220
1-228-989-00 s RES, ADJ METAL 470
                                                                                                                                                                                                                                               S2
     RV 217
                                                                                                                                                                                                                                                                                1-570-157-51 s SWITCH, SLIDE
     RV218
     RV 219
     RV 221
     RV 222
                                      1-228-989-00 s RES, ADJ METAL 470
1-228-993-00 s RES, ADJ METAL 4.7K
1-237-503-21 s RES, ADJ METAL 10K
1-228-990-00 s RES, ADJ METAL 1K
     RV 223
     RV 231
      RV301
      RV302
                                      1-570-514-11 s SWITCH, SLIDE
1-570-514-11 s SWITCH, SLIDE
1-570-514-11 s SWITCH, SLIDE
      S2
      S3
                                        1-570-514-11 s SWITCH, SLIDE
                                      1-577-295-11 s VCO, CRYSTAL 17.734475MHz
1-577-259-11 s CRYSTAL 17.734476 MHz
1-577-295-11 s VCO, CRYSTAL 17.734475MHz
1-577-259-11 s CRYSTAL 17.734476 MHz
      X101
      X102
      X201
      X202
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DA-63 BO	ARD used for	 DFS-500	(DA-63 B	BOARD used for DFS-500)
Ref. No.	Part No.	SP Description	Ref. No.	Part No. SP Description
		A O MOUNTED CIRCUIT BOARD, DA-63 1 O SUPPORT (M3X10), HEXAGON 1 O LEVER, PC BOARD 1 S NUT, PLATE 1 O PLATE, SHIELD	C130 C131 C132 C201 C203	1-124-589-11 s ELECT 47uF 20% 16V 1-124-589-11 s ELECT 47uF 20% 16V
8pcs 2pcs 2pcs 6pcs 12pcs	4-886-821-1 7-622-207-0 7-626-320-1 7-628-254-4 7-682-947-0	1 s SCREW, S TIGHT, +PTTWH 3X6 5 s N 2.6, TYPE 2 1 s PIN, SPRING 3X8 0 s SCREW +PS 2.6X12 1 s SCREW +PSW 3X6	C205 C207 C209 C215 C217	1-124-589-11 s ELECT 47uF 20% 16V 1-124-589-11 s ELECT 47uF 20% 16V
C1 C3 C5 C7 C9	1-124-589-1 1-124-589-1 1-124-589-1 1-124-589-1 1-124-589-1	1 S ELECT 47uF 20% 16V 1 S ELECT 47uF 20% 16V	C219 C221 C223 C225 C227	1-124-589-11 s ELECT 47uF 20% 16V 1-124-589-11 s ELECT 47uF 20% 16V
C11 C13 C15 C17 C19	1-124-589-1 1-124-589-1 1-124-589-1 1-124-589-1 1-124-282-0	1 S ELECT 47UF 20% 16V 1 S ELECT 47UF 20% 16V 1 S ELECT 47UF 20% 16V 1 S ELECT 47UF 20% 16V 10 S ELECT, NONPOLAR 22UF 20% 25V	C229 C301 C303 C306 C307	1-124-589-11 s ELECT 47uF 20% 16V 1-124-589-11 s ELECT 47uF 20% 16V 1-124-589-11 s ELECT 47uF 20% 16V 1-163-237-11 s CERAMIC, CHIP 27PF 5% 50V 1-163-237-11 s CERAMIC, CHIP 27PF 5% 50V
C20 C23 C25 C26 C28	1-163-235-1 1-163-251-1 1-163-251-1 1-124-589-1 1-163-251-1	1 s CERAMIC, CHIP 22PF 5% 50V 1 s CERAMIC, CHIP 100PF 5% 50V 1 s CERAMIC, CHIP 100PF 5% 50V 1 s ELECT 47uF 20% 16V 1 s CERAMIC, CHIP 100PF 5% 50V	C309 C314 C318 C319 C320	1-163-237-11 s CERAMIC, CHIP 27PF 5% 50V 1-163-235-11 s CERAMIC, CHIP 22PF 5% 50V 1-124-282-00 s ELECT, NONPOLAR 22uF 20% 25V 1-124-282-00 s ELECT, NONPOLAR 22uF 20% 25V 1-124-589-11 s ELECT 47uF 20% 16V
C29 C31 C32 C34 C36	1-124-589-1 1-131-341-0 1-124-589-1 1-124-589-1 1-124-589-1	11 S ELECT 47uF 20% 16V 00 S TANTALUM 0.1uF 10% 35V 11 S ELECT 47uF 20% 16V 11 S ELECT 47uF 20% 16V 11 S ELECT 47uF 20% 16V	C322 C324 C325 C347 C350	1-124-589-11 s ELECT 47uF 20% 16V 1-163-235-11 s CERAMIC, CHIP 22PF 5% 50V 1-124-589-11 s ELECT 47uF 20% 16V 1-124-589-11 s ELECT 47uF 20% 16V 1-163-235-11 s CERAMIC, CHIP 22PF 5% 50V
C39 C40 C43 C45 C47	1-164-232-1 1-124-589-1 1-124-589-1 1-124-589-1 1-124-589-1	11 s CERAMIC 0.01uF 10% 100V 11 s ELECT 47uF 20% 16V 11 s ELECT 47uF 20% 16V 11 s ELECT 47uF 20% 16V 11 s ELECT 47uF 20% 16V	C401 C403 C405 C406 C407	1-124-589-11 s ELECT 47uF 20% 16V 1-124-589-11 s ELECT 47uF 20% 16V 1-162-638-11 s CERAMIC, CHIP 1uF 16V 1-131-374-00 s TANTALUM 33uF 10% 16V 1-163-227-11 s CERAMIC, CHIP 10PF 5% 50V
C50 C51 C53 C54 C55	1-131-345-0 1-131-351-0	11 S CERAMIC, CHIP 22PF 5% 50V 11 S ELECT 47uF 20% 16V 10 S TANTALUM 0.47uF 10% 35V 10 S TANTALUM 4.7uF 10% 35V 11 S ELECT 47uF 20% 16V	C415 C416 C418 C420 C424	1-164-232-11 s CERAMIC 0.01uF 10% 100V 1-164-232-11 s CERAMIC 0.01uF 10% 100V 1-124-589-11 s ELECT 47uF 20% 16V 1-124-589-11 s ELECT 47uF 20% 16V 1-124-589-11 s ELECT 47uF 20% 16V
C57 C59 C62 C65 C66	1-124-589-1 1-164-232-1 1-163-251-1	11 S ELECT 47uF 20% 16V 11 S ELECT 47uF 20% 16V 11 S CERAMIC 0.01uF 10% 100V 11 S CERAMIC, CHIP 100PF 5% 50V 11 S ELECT 47uF 20% 16V	C426 C430 C431 C432 C433	1-124-589-11 s ELECT 47uF 20% 16V 1-163-224-11 s CERAMIC 7PF 0.25PF 50V 1-163-241-11 s CERAMIC, CHIP 39PF 5% 50V 1-163-227-11 s CERAMIC, CHIP 10PF 5% 50V 1-124-589-11 s ELECT 47uF 20% 16V
C69 C70 C71 C77 C78	1-124-589-1 1-163-251-1	11 s CERAMIC, CHIP 100PF 5% 50V 11 s CERAMIC, CHIP 100PF 5% 50V 11 s ELECT 47uF 20% 16V 11 s CERAMIC, CHIP 100PF 5% 50V 00 s CERAMIC, CHIP 150PF 5% 50V	C435 C437 C439 C501 C503	1-124-589-11 s ELECT 47uF 20% 16V 1-124-589-11 s ELECT 47uF 20% 16V
C80 C85 C86 C87 C88	1-124-589-1 1-124-589-1 1-124-589-1	11 S CERAMIC, CHIP 100PF 5% 50V 11 S ELECT 47uF 20% 16V 11 S ELECT 47uF 20% 16V 11 S ELECT 47uF 20% 16V 11 S ELECT 47uF 20% 16V	C505 C507 C509 C511 C513	1-124-589-11 s ELECT 47uF 20% 16V 1-124-589-11 s ELECT 47uF 20% 16V
C101 C103 C107 C124	1-124-589-1 1-124-589-1	11 S ELECT 47uF 20% 16V 11 S ELECT 47uF 20% 16V 11 S ELECT 47uF 20% 16V 11 S ELECT 47uF 20% 16V	C515 C517 C519 C521	1-124-589-11 s ELECT 47uF 20% 16V 1-124-589-11 s ELECT 47uF 20% 16V 1-124-589-11 s ELECT 47uF 20% 16V 1-124-282-00 s ELECT, NONPOLAR 22uF 20% 25V



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(DA-63 BOARD used for DFS-500)
(DA-63 BOARD used for DFS-500)
                                                                                                                                                                           Ref. No. or Q'ty Part No.
Ref. No. or Q'ty Part No.
                                                                                                                                                                                                                              SP Description
                                                        SP Description
                        1-124-589-11 s ELECT 47uF 20% 16V
1-124-589-11 s ELECT 47uF 20% 16V
1-124-282-00 s ELECT, NONPOLAR 22uF 20% 25V
1-163-243-11 s CERAMIC, CHIP 47PF 5% 50V
1-163-243-11 s CERAMIC, CHIP 47PF 5% 50V
                                                                                                                                                                                                    1-506-748-11 o CONNECTOR, DIN 96P, MALE
1-580-097-11 s CONNECTOR, PICL-S 50P, MALE
1-580-097-11 s CONNECTOR, PICL-S 50P, MALE
                                                                                                                                                                            CN3
C525
                                                                                                                                                                           CN40
C527
                                                                                                                                                                           CN50
C529
 C530
                                                                                                                                                                                                   8-719-104-34 s DIODE 1S2835
8-719-800-76 s DIODE 1SS226
8-719-800-76 s DIODE 1SS226
8-719-800-60 s LED TLR214, RED
                                                                                                                                                                           D2
                         1-124-282-00 s ELECT, NONPOLAR 22uF 20% 25V
1-124-589-11 s ELECT 47uF 20% 16V
1-124-589-11 s ELECT 47uF 20% 16V
1-164-232-11 s CERAMIC 0.01uF 10% 100V
1-163-222-11 s CERAMIC, CHIP 5PF 50V
                                                                                                                                                                           D3
 C534
                                                                                                                                                                           D4
 C535
 C537
                                                                                                                                                                                                    1-415-339-00 s DELAY LINE 300NS
1-415-502-11 s DELAY LINE 100NS
1-415-502-11 s DELAY LINE 100NS
 C539
                                                                                                                                                                            DL503
 C543
                                                                                                                                                                           DL504
                         1-163-087-00 s CERAMIC, CHIP 4PF 50V
1-163-224-11 s CERAMIC 7PF 0.25PF 50V
1-163-224-11 s CERAMIC 7PF 0.25PF 50V
1-163-227-11 s CERAMIC, CHIP 10PF 5% 50V
1-124-589-11 s ELECT 47uF 20% 16V
 C544
                                                                                                                                                                                                    1-235-161-00 s FILTER, BANDPASS 3.58MHz 1-235-786-11 s FILTER, LOW-PASS
 C545
C546
                                                                                                                                                                            FL301
                                                                                                                                                                                                    1-235-584-11 s FILTER, LOW-PASS
1-235-161-00 s FILTER, BANDPASS 3.58MHz
1-239-085-11 s FILTER, LOW-PASS
                                                                                                                                                                            FL302
 C547
                                                                                                                                                                             FL401
                                                                                                                                                                            FL501
                          1-124-589-11 s ELECT 47uF 20% 16V
1-163-087-00 s CERAMIC, CHIP 4PF 50V
1-163-227-11 s CERAMIC, CHIP 10PF 5% 50V
1-163-087-00 s CERAMIC, CHIP 4PF 50V
1-163-227-11 s CERAMIC, CHIP 10PF 5% 50V
 C551
                                                                                                                                                                                                    1-239-085-11 s FILTER, LOW-PASS
1-235-758-11 s FILTER, LOW-PASS
1-235-758-11 s FILTER, LOW-PASS
                                                                                                                                                                            FL502
 C553
C554
                                                                                                                                                                           FL503
FL504
  C560
                                                                                                                                                                                                     1-235-161-00 s FILTER, BANDPASS 3.58MHz
                                                                                                                                                                            FL505
  C561
                          1-124-589-11 s ELECT 47uF 20% 16V
1-124-589-11 s ELECT 47uF 20% 16V
1-124-282-00 s ELECT, NONPOLAR 22uF 20% 25V
1-162-638-11 s CERAMIC, CHIP 1uF 16V
1-131-374-00 s TANTALUM 33uF 10% 16V
                                                                                                                                                                                                     8-759-520-06 s IC NJM7809FA
                                                                                                                                                                                                    8-759-700-68 s IC NJM79L09A
8-759-231-53 s IC TA7805S
8-741-104-00 s IC BX1040
8-759-101-12 s IC UPC311G2
                                                                                                                                                                            IC2
  C565
                                                                                                                                                                           ĪC3
  C567
                                                                                                                                                                            IC4
IC5
  C573
  C574
                           1-124-589-11 s ELECT 47uF 20% 16V
1-124-589-11 s ELECT 47uF 20% 16V
1-124-282-00 s ELECT, NONPOLAR 22uF 20% 25V
1-162-638-11 s CERAMIC, CHIP 1uF 16V
1-131-374-00 s TANTALUM 33uF 10% 16V
                                                                                                                                                                                                    8-752-335-47 s IC CXD1216M
8-741-129-10 s IC BX-1291
8-752-332-67 s IC CXD1217M
1-808-513-12 s IC IB-38
                                                                                                                                                                             IC7
  C577
                                                                                                                                                                             IC8
  C579
                                                                                                                                                                             TC9
  C584
                                                                                                                                                                                                      8-759-925-72 s IC SN74HC02NS
                                                                                                                                                                             IC10
  C585
                           1-163-227-11 s CERAMIC, CHIP 10PF 5% 50V
1-163-227-11 s CERAMIC, CHIP 10PF 5% 50V
1-164-232-11 s CERAMIC 0.01uF 10% 100V
1-164-232-11 s CERAMIC 0.01uF 10% 100V
1-124-589-11 s ELECT 47uF 20% 16V
                                                                                                                                                                                                    8-759-948-28 s IC SM5828P
8-759-907-81 s IC SN74LS221NS
8-759-907-81 s IC SN74LS221NS
8-759-926-82 s IC SN74HC574ANS
8-759-926-82 s IC SN74HC574ANS
  C586
                                                                                                                                                                              IC12
  C587
                                                                                                                                                                             IC13
  C589
                                                                                                                                                                             IC14
  C590
                                                                                                                                                                             IC15
  C592
                                                                                                                                                                                                     8-759-926-82 s IC SN74HC574ANS
8-759-209-20 s IC TC4584BF
8-759-209-20 s IC TC4584BF
8-759-989-56 s IC SN74ALS244BNS
8-759-300-71 s IC HD14053BFP
                           1-124-589-11 s ELECT 47uF 20% 16V

1-164-232-11 s CERAMIC 0.01uF 10% 100V

1-163-224-11 s CERAMIC 7PF 0.25PF 50V

1-163-235-11 s CERAMIC, CHIP 22PF 5% 50V

1-124-589-11 s ELECT 47uF 20% 16V
                                                                                                                                                                             IC16
  C594
                                                                                                                                                                             IC17
   C599
                                                                                                                                                                              IC18
   C601
                                                                                                                                                                             IC19
   C605
                                                                                                                                                                             IC20
   C606
                                                                                                                                                                                                     8-759-063-39 s IC CXD8267Q
8-759-063-39 s IC CXD8267Q
8-759-063-38 s IC CXD8276Q
8-759-063-38 s IC CXD8276Q
8-759-063-38 s IC CXD8276Q
                            1-124-589-11 s ELECT 47uF 20% 16V
1-164-232-11 s CERAMIC 0.01uF 10% 100V
1-124-589-11 s ELECT 47uF 20% 16V
1-124-589-11 s ELECT 47uF 20% 16V
1-164-232-11 s CERAMIC 0.01uF 10% 100V
                                                                                                                                                                             IC101
   C608
                                                                                                                                                                              IC102
   C610
                                                                                                                                                                              IC103
   C614
                                                                                                                                                                              IC104
   C616
                                                                                                                                                                              IC105
   C624
                           1-163-243-11 S CERAMIC, CHIP 47PF 5% 50V
1-124-589-11 S ELECT 47uF 20% 16V
1-124-589-11 S ELECT 47uF 20% 16V
1-164-232-11 S CERAMIC 0.01uF 10% 100V
1-124-589-11 S ELECT 47uF 20% 16V
                                                                                                                                                                                                     8-759-926-82 s IC SN74HC574ANS
                                                                                                                                                                              IC108
   C630
                                                                                                                                                                             IC109
   C631
                                                                                                                                                                              IC110
IC111
   C633
   C635
                                                                                                                                                                             IC112
   C637
                                                                                                                                                                                                     8-759-063-38 s IC CXD8276Q
8-759-063-38 s IC CXD8276Q
8-759-063-38 s IC CXD8276Q
8-759-505-01 s IC CXD8054
8-759-926-82 s IC SN74HC574ANS
                            1-124-589-11 s ELECT 47UF 20% 16V
1-163-243-11 s CERAMIC, CHIP 47PF 5% 50V
1-164-232-11 s CERAMIC 0.01UF 10% 100V
1-163-099-00 s CERAMIC, CHIP 18PF 5% 50V
1-163-243-11 s CERAMIC, CHIP 47PF 5% 50V
                                                                                                                                                                             IC114
   C639
                                                                                                                                                                             IC115
IC116
IC117
   C643
   C646
   C650
                                                                                                                                                                              IC118
   C658
                                                                                                                                                                                                     8-759-926-82 s IC SN74HC574ANS
8-759-982-25 s IC RC78L09A
8-759-708-05 s IC NJM78L05A
8-759-515-12 s IC SN74ALS574BNS
                                                                                                                                                                             IC119
                             1-124-282-00 s ELECT, NONPOLAR 22uF 20% 25V
   C659
                                                                                                                                                                             IC201
                             1-506-748-11 o CONNECTOR, DIN 96P, MALE 1-506-748-11 o CONNECTOR, DIN 96P, MALE
                                                                                                                                                                              IC202
   CN1
   CN<sub>2</sub>
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(DA-63 BOARD used for DFS-500) (DA-63 BOARD used for DFS-500)		
Ref. No. or Q'ty Part No. SP Description	Ref. No. or Q'ty Part No. SP Description	
IC204 8-759-515-12 s IC SN74ALS574BNS IC205 8-759-515-12 s IC SN74ALS574BNS IC206 8-759-515-12 s IC SN74ALS574BNS IC207 8-752-032-93 s IC CXA1260Q-Z IC208 8-752-032-96 s IC CXA1106M	L12 1-410-470-11 s INDUCTOR 10uH L13 1-410-470-11 s INDUCTOR 10uH L14 1-412-525-31 s INDUCTOR 10uH L15 1-412-525-31 s INDUCTOR 10uH L101 1-412-525-31 s INDUCTOR 10uH	
IC401 8-759-906-59 S IC CX22017 IC402 8-759-702-07 S IC NJM13700M IC501 8-759-520-06 S IC NJM7809FA IC502 8-759-701-87 S IC NJM7909FA IC503 8-759-231-53 S IC TA7805S	L202 1-410-470-11 s INDUCTOR 10uH L203 1-410-470-11 s INDUCTOR 10uH L204 1-410-470-11 s INDUCTOR 10uH L205 1-410-470-11 s INDUCTOR 10uH L206 1-410-470-11 s INDUCTOR 10uH	
IC504 8-759-701-84 s IC NJM7905FA IC505 8-759-984-88 s IC LM6361M IC506 8-759-984-88 s IC LM6361M IC507 8-759-984-88 s IC LM6361M IC508 8-759-702-07 s IC NJM13700M	L207 1-410-470-11 s INDUCTOR 10uH L301 1-410-470-11 s INDUCTOR 10uH L302 1-410-470-11 s INDUCTOR 10uH L303 1-408-418-00 s INDUCTOR 56uH L401 1-410-470-11 s INDUCTOR 10uH	
IC509 8-741-135-60 s IC BX1356 IC510 8-741-135-60 s IC BX1356 IC511 8-741-135-60 s IC BX1356 IC512 8-759-984-88 s IC LM6361M IC513 8-759-984-88 s IC LM6361M	L402 1-408-425-00 s INDUCTOR 220uH L403 1-410-470-11 s INDUCTOR 10uH L404 1-410-470-11 s INDUCTOR 10uH L501 1-410-470-11 s INDUCTOR 10uH L502 1-410-470-11 s INDUCTOR 10uH	
IC514 8-759-906-59 s IC CX22017 IC516 8-759-702-07 s IC NJM13700M IC517 8-752-052-73 s IC CXA1451M IC518 8-759-984-88 s IC LM6361M IC519 8-752-052-73 s IC CXA1451M	L503 1-410-470-11 s INDUCTOR 10uH L504 1-410-470-11 s INDUCTOR 10uH L505 1-410-470-11 s INDUCTOR 10uH L506 1-408-425-00 s INDUCTOR 220uH L507 1-410-470-11 s INDUCTOR 10uH	
IC520 8-759-984-88 s IC LM6361M IC521 8-759-702-07 s IC NJM13700M IC522 8-752-052-73 s IC CXA1451M IC523 8-759-984-88 s IC LM6361M IC524 8-752-052-73 s IC CXA1451M	L508 1-410-470-11 s INDUCTOR 10uH PS1	
IC525 8-759-702-07 s IC NJM13700M IC526 8-759-984-88 s IC LM6361M IC601 8-759-989-56 s IC SN74ALS244BNS IC602 8-759-989-56 s IC SN74ALS244BNS IC603 8-759-989-56 s IC SN74ALS244BNS	Q1 8-729-120-28 s TRANSISTOR 2SC1623-L5L6 Q2 8-729-112-65 s TRANSISTOR 2SA1462-Y33 Q3 8-729-120-28 s TRANSISTOR 2SC1623-L5L6 Q4 8-729-109-44 s TRANSISTOR 2SK94 Q5 8-729-120-28 s TRANSISTOR 2SC1623-L5L6	
JR1 1-216-295-00 s METAL, CHIP 0 JR3 1-216-295-00 s METAL, CHIP 0 JR5 1-216-295-00 s METAL, CHIP 0 JR7 1-216-295-00 s METAL, CHIP 0 JR9 1-216-295-00 s METAL, CHIP 0	Q6 8-729-175-73 s TRANSISTOR 2SC2757 Q7 8-729-112-65 s TRANSISTOR 2SA1462-Y33 Q8 8-729-120-28 s TRANSISTOR 2SC1623-L5L6 Q9 8-729-109-44 s TRANSISTOR 2SK94 Q10 8-729-216-22 s TRANSISTOR 2SA1162	
JR11 1-216-295-00 s METAL, CHIP 0 JR13 1-216-295-00 s METAL, CHIP 0 JR15 1-216-295-00 s METAL, CHIP 0 JR17 1-216-295-00 s METAL, CHIP 0 JR21 1-216-295-00 s METAL, CHIP 0	Q11 8-729-216-22 S TRANSISTOR 2SA1162 Q201 8-729-120-28 S TRANSISTOR 2SC1623-L5L6 Q202 8-729-120-28 S TRANSISTOR 2SC1623-L5L6 Q203 8-729-120-28 S TRANSISTOR 2SC1623-L5L6 Q204 8-729-120-28 S TRANSISTOR 2SC1623-L5L6	
JR401 1-216-295-00 s METAL, CHIP 0 JR403 1-216-295-00 s METAL, CHIP 0	Q301 8-729-120-28 S TRANSISTOR 2SC1623-L5L6 Q302 8-729-120-28 S TRANSISTOR 2SC1623-L5L6 Q303 8-729-175-73 S TRANSISTOR 2SC2757	
L1 1-410-470-11 s INDUCTOR 10uH L2 1-410-470-11 s INDUCTOR 10uH L3 1-410-470-11 s INDUCTOR 10uH L4 1-408-413-00 s INDUCTOR 22uH	Q304 8-729-120-28 S TRANSISTOR 2SC1623-L5L6 Q305 8-729-120-28 S TRANSISTOR 2SC1623-L5L6 Q306 8-729-120-28 S TRANSISTOR 2SC1623-L5L6 Q307 8-729-216-22 S TRANSISTOR 2SC1623-L5L6 Q307 8-729-216-22 S TRANSISTOR 2SA1162	
L5 1-408-413-00 s INDUCTOR 22uH L6 1-410-470-11 s INDUCTOR 10uH L7 1-410-470-11 s INDUCTOR 10uH L8 1-410-470-11 s INDUCTOR 10uH	Q308 8-729-120-28 s TRANSISTOR 2SC1623-L5L6 Q309 8-729-175-73 s TRANSISTOR 2SC2757 Q311 8-729-216-22 s TRANSISTOR 2SA1162	
1.9 1-410-470-11 s INDUCTOR 10uH L10 1-410-470-11 s INDUCTOR 10uH L11 1-410-470-11 s INDUCTOR 10uH	Q312 8-729-120-28 s TRANSISTOR 2SC1623-L5L6 Q313 8-729-175-73 s TRANSISTOR 2SC2757 Q315 8-729-216-22 s TRANSISTOR 2SA1162 Q316 8-729-120-28 s TRANSISTOR 2SC1623-L5L6	

DFS-500/5

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(DA-63 BOARD used for DFS-500)
(DA-63 BOARD used for DFS-500)
                                                                                                                                             Ref. No. or Q'ty Part No.
Ref. No.
                                                                                                                                                                                             SP Description
or Q'ty Part No. SP Description
                                                                                                                                                                  8-729-216-22 s TRANSISTOR 2SA1162
8-729-116-64 s TRANSISTOR 2SK508-K51
8-729-112-65 s TRANSISTOR 2SA1462-Y33
8-729-216-22 s TRANSISTOR 2SA1162
8-729-116-64 s TRANSISTOR 2SK508-K51
                   8-729-120-28 s TRANSISTOR 2SC1623-L5L6
8-729-112-65 s TRANSISTOR 2SA1462-Y33
8-729-216-22 s TRANSISTOR 2SA1162
8-729-120-28 s TRANSISTOR 2SC1623-L5L6
                                                                                                                                              Q546
 Q402
                                                                                                                                              Q548
Q549
Q403
Q406
                                                                                                                                              Q551
 0408
                     8-729-120-28 s TRANSISTOR 2SC1623-L5L6
                                                                                                                                              Q553
 Q409
                    8-729-120-28 s TRANSISTOR 2SC1623-L5L6
8-729-120-28 s TRANSISTOR 2SC1623-L5L6
8-729-120-28 s TRANSISTOR 2SC1623-L5L6
8-729-116-64 s TRANSISTOR 2SK508-K51
                                                                                                                                                                   8-729-112-65 s TRANSISTOR 2SA1462-Y33
 Q410
                                                                                                                                              Q556
Q557
                                                                                                                                                                  8-729-216-22 s TRANSISTOR 2SA1162
8-729-175-73 s TRANSISTOR 2SC2757
 Q411
 Q413
                                                                                                                                              Q558
Q560
                                                                                                                                                                  8-729-216-22 s TRANSISTOR 2SA1162
8-729-116-64 s TRANSISTOR 2SK508-K51
 0414
                     8-729-112-65 s TRANSISTOR 2SA1462-Y33
 0415
                    8-729-112-65 s TRANSISTOR 2SA1462-Y33
8-729-112-65 s TRANSISTOR 2SA1462-Y33
                                                                                                                                              Q561
                                                                                                                                                                   8-729-112-65 s TRANSISTOR 2SA1462-Y33
 Q416
                                                                                                                                              Q563
                                                                                                                                                                   8-729-216-22 s TRANSISTOR 2SA1162
 Q417
Q418
                     8-729-175-73 s TRANSISTOR 2SC2757
8-729-175-73 s TRANSISTOR 2SC2757
                                                                                                                                              Q564
                                                                                                                                                                   8-729-175-73 s TRANSISTOR 2SC2757
                                                                                                                                               0565
                                                                                                                                                                   8-729-216-22 s TRANSISTOR 2SA1162
 0419
                                                                                                                                              Q567
                                                                                                                                                                   8-729-116-64 s TRANSISTOR 2SK508-K51
                     8-729-175-73 s TRANSISTOR 2SC2757
  Q420
                     8-729-175-73 s TRANSISTOR 2SC2757
8-729-120-28 s TRANSISTOR 2SC1623-L5L6
8-729-120-28 s TRANSISTOR 2SC1623-L5L6
8-729-112-65 s TRANSISTOR 2SA1462-Y33
                                                                                                                                                                   8-729-112-65 s TRANSISTOR 2SA1462-Y33
8-729-120-28 s TRANSISTOR 2SC1623-L5L6
 Q421
Q422
Q423
Q424
                                                                                                                                               Q568
                                                                                                                                               Q572
                                                                                                                                               Q573
                                                                                                                                                                   8-729-216-22 s TRANSISTOR 2SA1162
                                                                                                                                              Q574
Q577
                                                                                                                                                                   8-729-120-28 S TRANSISTOR 2SC1623-L5L6
8-729-175-73 S TRANSISTOR 2SC2757
                     8-729-216-22 s TRANSISTOR 2SA1162
  Q425
                                                                                                                                              Q578
                                                                                                                                                                   8-729-216-22 s TRANSISTOR 2SA1162
                      8-729-216-22 s TRANSISTOR 2SA1162
  0426
                     8-729-120-28 S TRANSISTOR 2SC1623-L5L6
8-729-120-28 S TRANSISTOR 2SC1623-L5L6
8-729-120-28 S TRANSISTOR 2SC1623-L5L6
8-729-120-28 S TRANSISTOR 2SC1623-L5L6
 Q427
Q428
Q501
                                                                                                                                                                  1-216-691-11 s METAL, CHIP 47K 0.5% 1/10W 1-216-615-11 s METAL, CHIP 33 0.5% 1/10W 1-218-776-11 s METAL 1M 0.5% 1/10W 1-216-683-11 s METAL, CHIP 22K 0.5% 1/10W 1-216-695-11 s METAL, CHIP 68K 0.5% 1/10W
                                                                                                                                              R2
                                                                                                                                              R7
                      8-729-120-28 s TRANSISTOR 2SC1623-L5L6
                                                                                                                                              R8
                                                                                                                                              R10
                                                                                                                                             R13
                      8-729-216-22 s TRANSISTOR 2SA1162
  Q503
                     8-729-120-28 s TRANSISTOR 2SC1623-L5L6
8-729-120-28 s TRANSISTOR 2SC1623-L5L6
8-729-216-22 s TRANSISTOR 2SC1623-L5L6
8-729-216-22 s TRANSISTOR 2SA1162
8-729-216-22 s TRANSISTOR 2SA1162
  Q506
Q507
                                                                                                                                                                  1-216-623-11 s METAL, CHIP 68 0.5% 1/10W 1-216-691-11 s METAL, CHIP 47K 0.5% 1/10W 1-216-691-11 s METAL, CHIP 47K 0.5% 1/10W 1-216-649-11 s METAL, CHIP 820 0.5% 1/10W 1-216-649-11 s METAL, CHIP 820 0.5% 1/10W
                                                                                                                                               R23
  Q508
                                                                                                                                               R24
  Q512
                                                                                                                                               R26
                                                                                                                                              R27
                      8-729-216-22 s TRANSISTOR 2SA1162
  Q514
 Q515
Q516
Q517
Q518
                      8-729-120-28 s TRANSISTOR 2SC1623-L5L6
                                                                                                                                                                   1-216-642-11 s METAL, CHIP 430 0.5% 1/10W 1-216-663-11 s METAL, CHIP 3.3K 0.5% 1/10W 1-216-687-11 s METAL, CHIP 33K 0.5% 1/10W 1-216-623-11 s METAL, CHIP 68 0.5% 1/10W 1-216-663-11 s METAL, CHIP 3.3K 0.5% 1/10W
                     8-729-116-64 s TRANSISTOR 2SK508-K51
8-729-112-65 s TRANSISTOR 2SA1462-Y33
8-729-175-73 s TRANSISTOR 2SC2757
                                                                                                                                              R31
                                                                                                                                               R36
                                                                                                                                               R38
                      8-729-175-73 s TRANSISTOR 2SC2757
8-729-112-65 s TRANSISTOR 2SA1462-Y33
8-729-120-28 s TRANSISTOR 2SC1623-L5L6
8-729-120-28 s TRANSISTOR 2SC1623-L5L6
                                                                                                                                              R39
  Q519
  Q520
Q521
                                                                                                                                                                  1-216-683-11 s METAL, CHIP 22K 0.5% 1/10W 1-216-679-11 s METAL, CHIP 15K 0.5% 1/10W 1-216-663-11 s METAL, CHIP 3.3K 0.5% 1/10W 1-216-683-11 s METAL, CHIP 22K 0.5% 1/10W 1-216-647-11 s METAL, CHIP 680 0.5% 1/10W
                                                                                                                                              R41
                                                                                                                                              R44
  Q5 22
                                                                                                                                              R45
                      8-729-120-28 s TRANSISTOR 2SC1623-L5L6
  Q5 23
                                                                                                                                               R48
                       8-729-216-22 s TRANSISTOR 2SA1162
                                                                                                                                              R49
  Q524
                      8-729-216-22 S TRANSISTOR 2SA1162
8-729-175-73 S TRANSISTOR 2SC2757
8-729-175-73 S TRANSISTOR 2SC2757
  Q5 25
                                                                                                                                                                  1-216-671-11 s METAL, CHIP 6.8K 0.5% 1/10W 1-216-647-11 s METAL, CHIP 680 0.5% 1/10W 1-216-655-11 s METAL, CHIP 1.5K 0.5% 1/10W 1-216-647-11 s METAL, CHIP 680 0.5% 1/10W 1-216-655-11 s METAL, CHIP 1.5K 0.5% 1/10W
  Q526
Q527
Q528
                                                                                                                                               R53
                                                                                                                                               R208
                       8-729-120-28 S TRANSISTOR 2SC1623-L5L6
                                                                                                                                               R209
                                                                                                                                               R210
                      8-729-112-65 s TRANSISTOR 2SA1462-Y33
8-729-120-28 s TRANSISTOR 2SC1623-L5L6
8-729-120-28 s TRANSISTOR 2SC1623-L5L6
8-729-216-22 s TRANSISTOR 2SA1162
8-729-175-73 s TRANSISTOR 2SC2757
                                                                                                                                               R211
  Q530
Q531
Q532
Q533
                                                                                                                                                                  1-216-669-11 s METAL, CHIP 5.6K 0.5% 1/10W 1-216-669-11 s METAL, CHIP 5.6K 0.5% 1/10W 1-216-641-11 s METAL, CHIP 390 0.5% 1/10W 1-216-641-11 s METAL, CHIP 390 0.5% 1/10W 1-216-669-11 s METAL, CHIP 5.6K 0.5% 1/10W
                                                                                                                                               R302
                                                                                                                                              R305
R309
                                                                                                                                               R310
  Q534
Q535
Q536
Q537
                      8-729-175-73 s TRANSISTOR 2SC2757
8-729-120-28 s TRANSISTOR 2SC1623-L5L6
8-729-112-65 s TRANSISTOR 2SA1462-Y33
8-729-216-22 s TRANSISTOR 2SA1162
                                                                                                                                               R312
                                                                                                                                                                  1-216-661-11 s METAL, CHIP 2.7K 0.5% 1/10W 1-216-669-11 s METAL, CHIP 5.6K 0.5% 1/10W 1-216-669-11 s METAL, CHIP 5.6K 0.5% 1/10W 1-216-669-11 s METAL, CHIP 5.6K 0.5% 1/10W 1-216-663-11 s METAL, CHIP 3.3K 0.5% 1/10W
                                                                                                                                               R313
                                                                                                                                              R315
R317
                       8-729-216-22 s TRANSISTOR 2SA1162
   Q538
                                                                                                                                              R319
                       8-729-120-28 s TRANSISTOR 2SC1623-L5L6
8-729-116-64 s TRANSISTOR 2SK508-K51
8-729-112-65 s TRANSISTOR 2SA1462-Y33
                                                                                                                                              R320
  Q540
  Q541
Q542
                                                                                                                                                                  1-216-655-11 s METAL, CHIP 1.5K 0.5% 1/10W 1-216-663-11 s METAL, CHIP 3.3K 0.5% 1/10W
                                                                                                                                              R328
                                                                                                                                              R336
                       8-729-175-73 s TRANSISTOR 2SC2757
   Q545
```

(DA-63 BOARD used for DFS-500) (DA-63 BOARD used for DFS-500) Ref. No. or Q'ty Part No. Ref. No. or Q'ty Part No. SP Description SP Description 1-216-655-11 s METAL, CHIP 1.5K 0.5% 1/10W 1-216-687-11 s METAL, CHIP 33K 0.5% 1/10W 1-216-687-11 s METAL, CHIP 33K 0.5% 1/10W 1-216-643-11 s METAL, CHIP 470 0.5% 1/10W 1-216-657-11 s METAL, CHIP 1.8K 0.5% 1/10W 1-215-394-00 s METAL 75 1% 1/6W 1-215-394-00 s METAL 75 1% 1/6W 1-216-673-11 s METAL, CHIP 8.2K 0.5% 1/10W 1-216-691-11 s METAL, CHIP 47K 0.5% 1/10W 1-216-643-11 s METAL, CHIP 470 0.5% 1/10W R590 R339 R591 R406 R593 R407 R594 R408 R601 R418 1-216-669-11 s METAL, CHIP 5.6K 0.5% 1/10W 1-216-657-11 s METAL, CHIP 1.8K 0.5% 1/10W 1-216-663-11 s METAL, CHIP 3.3K 0.5% 1/10W 1-216-687-11 s METAL, CHIP 33K 0.5% 1/10W 1-216-687-11 s METAL, CHIP 33K 0.5% 1/10W 1-216-673-11 S METAL, CHIP 8.2K 0.5% 1/10W 1-216-657-11 S METAL, CHIP 1.8K 0.5% 1/10W 1-216-669-11 S METAL, CHIP 5.6K 0.5% 1/10W 1-216-669-11 S METAL, CHIP 5.6K 0.5% 1/10W 1-216-655-11 S METAL, CHIP 1.5K 0.5% 1/10W R605 R606 R424 R425 R611 R616 R426 R617 R433 1-216-643-11 s METAL, CHIP 470 0.5% 1/10W 1-216-673-11 s METAL, CHIP 8.2% 0.5% 1/10W 1-216-691-11 s METAL, CHIP 47K 0.5% 1/10W 1-216-643-11 s METAL, CHIP 470 0.5% 1/10W 1-216-677-11 s METAL, CHIP 12% 0.5% 1/10W 1-216-655-11 s METAL, CHIP 1.5K 0.5% 1/10W 1-216-655-11 s METAL, CHIP 1.5K 0.5% 1/10W 1-216-663-11 s METAL, CHIP 33K 0.5% 1/10W 1-216-663-11 s METAL, CHIP 3.3K 0.5% 1/10W 1-216-663-11 s METAL, CHIP 3.3K 0.5% 1/10W R618 R434 R621 R437 **R444** R622 R628 R445 R634 R446 1-216-663-11 s METAL, CHIP 3.3K 0.5% 1/10W 1-216-687-11 s METAL, CHIP 33K 0.5% 1/10W 1-216-687-11 s METAL, CHIP 33K 0.5% 1/10W 1-216-643-11 s METAL, CHIP 470 0.5% 1/10W 1-216-657-11 s METAL, CHIP 1.8K 0.5% 1/10W 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W 1-216-639-11 s METAL, CHIP 330 0.5% 1/10W 1-216-663-11 s METAL, CHIP 3.3K 0.5% 1/10W 1-216-639-11 s METAL, CHIP 330 0.5% 1/10W 1-216-647-11 s METAL, CHIP 680 0.5% 1/10W R635 R447 R640 R449 R450 R641 R642 R451 R454 1-216-637-11 s METAL, CHIP 270 0.5% 1/10W 1-216-663-11 s METAL, CHIP 3.3K 0.5% 1/10W 1-216-309-00 s METAL, CHIP 5.6 5% 1/10W 1-216-309-00 s METAL, CHIP 5.6 5% 1/10W 1-216-309-00 s METAL, CHIP 5.6 5% 1/10W 1-216-657-11 s METAL, CHIP 1.8K 0.5% 1/10W 1-216-673-11 s METAL, CHIP 8.2K 0.5% 1/10W 1-216-669-11 s METAL, CHIP 5.6K 0.5% 1/10W 1-216-663-11 s METAL, CHIP 33K 0.5% 1/10W 1-216-663-11 s METAL, CHIP 3.3K 0.5% 1/10W R649 R457 R650 R458 R661 R459 R662 R460 1-216-663-11 s METAL, CHIP 3.3K 0.5% 1/10W 1-216-655-11 s METAL, CHIP 1.5K 0.5% 1/10W 1-216-687-11 s METAL, CHIP 3.3K 0.5% 1/10W 1-216-663-11 s METAL, CHIP 3.3K 0.5% 1/10W 1-216-663-11 s METAL, CHIP 3.3K 0.5% 1/10W 1-216-309-00 s METAL, CHIP 5.6 5% 1/10W 1-215-394-00 s METAL 75 1% 1/6W R663 R461 R672 R462 R684 R463 R685 R464 R686 R465 1-216-673-11 s METAL, CHIP 8.2K 0.5% 1/10W 1-216-691-11 s METAL, CHIP 47K 0.5% 1/10W 1-216-643-11 s METAL, CHIP 470 0.5% 1/10W 1-216-673-11 s METAL, CHIP 8.2K 0.5% 1/10W 1-216-691-11 s METAL, CHIP 47K 0.5% 1/10W 1-216-647-11 s METAL, CHIP 680 0.5% 1/10W 1-215-394-00 s METAL 75 1% 1/6W 1-216-649-11 s METAL, CHIP 820 0.5% 1/10W 1-216-687-11 s METAL, CHIP 33K 0.5% 1/10W 1-216-663-11 s METAL, CHIP 3.3K 0.5% 1/10W R502 R688 R503 R692 R699 R515 R710 R519 R711 R520 1-216-643-11 s METAL, CHIP 470 0.5% 1/10W 1-216-640-11 s METAL, CHIP 360 0.5% 1/10W 1-216-663-11 s METAL, CHIP 3.3% 0.5% 1/10W 1-216-671-11 s METAL, CHIP 6.8% 0.5% 1/10W 1-216-647-11 s METAL, CHIP 680 0.5% 1/10W R712 1-216-663-11 s METAL, CHIP 3.3K 0.5% 1/10W R532 1-210-003-11 S METAL, CHIP 3.3A 0.5% 1/10W 1-216-647-11 S METAL, CHIP 680 0.5% 1/10W 1-215-394-00 S METAL 75 1% 1/6W 1-216-640-11 S METAL, CHIP 360 0.5% 1/10W 1-216-655-11 S METAL, CHIP 1.5K 0.5% 1/10W R537 R714 R718 R539 R721 R547 R548 1-216-687-11 s METAL, CHIP 33K 0.5% 1/10W 1-216-663-11 s METAL, CHIP 3.3K 0.5% 1/10W 1-216-663-11 s METAL, CHIP 3.3K 0.5% 1/10W 1-216-661-11 s METAL, CHIP 2.7K 0.5% 1/10W 1-216-665-11 s METAL, CHIP 3.9K 0.5% 1/10W 1-216-643-11 s METAL, CHIP 470 0.5% 1/10W 1-216-663-11 s METAL, CHIP 3.3% 0.5% 1/10W 1-216-687-11 s METAL, CHIP 33% 0.5% 1/10W 1-216-663-11 s METAL, CHIP 3.3% 0.5% 1/10W 1-216-663-11 s METAL, CHIP 3.3% 0.5% 1/10W R730 R556 R732 R557 R739 R558 R740 R559 R741 R561 1-216-653-11 s METAL, CHIP 1.2K 0.5% 1/10W 1-216-671-11 s METAL, CHIP 6.8K 0.5% 1/10W 1-216-647-11 s METAL, CHIP 680 0.5% 1/10W 1-216-647-11 s METAL, CHIP 680 0.5% 1/10W 1-216-663-11 s METAL, CHIP 3.3K 0.5% 1/10W 1-216-647-11 s METAL, CHIP 680 0.5% 1/10W 1-215-394-00 s METAL 75 1% 1/6W 1-216-640-11 s METAL, CHIP 360 0.5% 1/10W 1-216-655-11 s METAL, CHIP 1.5% 0.5% 1/10W 1-216-643-11 s METAL, CHIP 470 0.5% 1/10W R743 R563 R747 R564 R571 R573 R750 R756 R574 1-216-663-11 s METAL, CHIP 3.3K 0.5% 1/10W 1-216-687-11 s METAL, CHIP 33K 0.5% 1/10W 1-216-663-11 s METAL, CHIP 3.3K 0.5% 1/10W 1-216-663-11 s METAL, CHIP 3.3K 0.5% 1/10W 1-216-647-11 s METAL, CHIP 680 0.5% 1/10W 1-215-394-00 s METAL 75 1% 1/6W 1-215-394-00 s METAL 75 1% 1/6W 1-216-647-11 s METAL, CHIP 680 0.5% 1/10W 1-216-663-11 s METAL, CHIP 3.3K 0.5% 1/10W 1-216-663-11 s METAL, CHIP 3.3K 0.5% 1/10W R761 R576 R768 R577 R578 R769 R770 R579 R772 R581 1-215-394-00 s METAL 75 1% 1/6W 1-215-394-00 s METAL 75 1% 1/6W 1-216-649-11 s METAL, CHIP 820 0.5% 1/10W 1-216-663-11 s METAL, CHIP 3.3% 0.5% 1/10W R776 1-215-394-00 s METAL 75 1% 1/6W R583 1-216-640-11 s METAL, CHIP 360 0.5% 1/10W 1-216-640-11 s METAL, CHIP 360 0.5% 1/10W 1-215-394-00 s METAL 75 1% 1/6W R778 R584 R779 R585 R588



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(DA-63 BOARD used for DFS-500)
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Ref. No. or Q'ty Part No.
                                              SP Description
                   1-215-394-00 s METAL 75 1% 1/6W
1-215-394-00 s METAL 75 1% 1/6W
1-216-643-11 s METAL, CHIP 470 0.5% 1/10W
1-216-669-11 s METAL, CHIP 5.6K 0.5% 1/10W
1-216-669-11 s METAL, CHIP 5.6K 0.5% 1/10W
R781
R782
R797
R798
R799
                    1-216-655-11 s METAL, CHIP 1.5K 0.5% 1/10W 1-216-643-11 s METAL, CHIP 470 0.5% 1/10W
 R808
 R811
                     1-231-411-00 s RESISTOR BLOCK 100Kx8
 RB101
                     1-231-411-00 s RESISTOR BLOCK 100Kx8
 RB102
                    1-231-411-00 s RESISTOR BLOCK 100Kx8
1-231-411-00 s RESISTOR BLOCK 100Kx8
 RB103
 RB104
                     1-231-411-00 s RESISTOR BLOCK 100Kx8
 RB105
                    1-231-411-00 s RESISTOR BLOCK 100Kx8
1-231-411-00 s RESISTOR BLOCK 100Kx8
1-231-411-00 s RESISTOR BLOCK 100Kx8
 RB106
 RB107
 RB108
                     1-231-411-00 s RESISTOR BLOCK 100Kx8
 RB109
                      1-231-411-00 s RESISTOR BLOCK 100Kx8
 RB110
                     1-231-411-00 s RESISTOR BLOCK 100Kx8
  RB111
  RB112
  RB113
  RB114
                      1-231-411-00 s RESISTOR BLOCK 100Kx8
  RB115
                     1-231-385-00 s RESISTOR BLOCK 4.7Kx8
1-231-385-00 s RESISTOR BLOCK 4.7Kx8
1-231-385-00 s RESISTOR BLOCK 4.7Kx8
  RB202
  RB203
  RB204
                      1-231-385-00 s RESISTOR BLOCK 4.7Kx8
  RB205
                      1-228-993-00 s RES, ADJ METAL 4.7K
1-237-503-21 s RES, ADJ METAL 10K
1-237-502-21 s RES, ADJ METAL 5K
1-228-995-00 s RES, ADJ METAL 22K
1-228-995-00 s RES, ADJ METAL 22K
  RV1
  RV2
  RV3
  RV4
                      1-228-995-00 s RES, ADJ METAL 22K
1-228-995-00 s RES, ADJ METAL 22K
1-228-995-00 s RES, ADJ METAL 22K
1-228-994-00 s RES, ADJ METAL 10K
1-228-994-00 s RES, ADJ METAL 10K
  RV6
  RV7
  RV8
   RV9
   RV10
                       1-237-501-21 s RES, ADJ METAL 2K
   RV11
                      1-228-989-00 s RES, ADJ METAL 470
1-228-993-00 s RES, ADJ METAL 4.7K
1-237-500-21 s RES, ADJ METAL 1K
1-228-990-00 s RES, ADJ METAL 1K
   RV301
  RV402
RV404
   RV406
                       1-228-993-00 S RES, ADJ METAL 4.7K
1-228-991-00 S RES, ADJ METAL 2.2K
   RV504
   RV506
                      1-237-500-21 s RES, ADJ METAL 1K
1-237-500-21 s RES, ADJ METAL 1K
1-237-500-21 s RES, ADJ METAL 1K
   RV507
RV508
   RV509
                       1-228-993-00 s RES, ADJ METAL 4.7K
1-228-991-00 s RES, ADJ METAL 2.2K
1-228-993-00 s RES, ADJ METAL 4.7K
1-228-989-00 s RES, ADJ METAL 470
1-237-501-21 s RES, ADJ METAL 2K
   RV511
   RV512
   RV514
RV515
   RV516
                       1-228-990-00 s RES, ADJ METAL 1K
1-237-501-21 s RES, ADJ METAL 2K
1-228-989-00 s RES, ADJ METAL 470
1-237-501-21 s RES, ADJ METAL 2K
1-228-989-00 s RES, ADJ METAL 470
   RV518
   RV520
   RV521
RV522
   RV 523
                       1-237-501-21 s RES, ADJ METAL 2K
1-228-990-00 s RES, ADJ METAL 1K
   RV524
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(DA-63 BOARD used for DFS-500)

Ref. No. or Q'ty	Part No. SP Description
RV526	1-228-989-00 s RES, ADJ METAL 470
S1 S2 S3 S101 S102	1-570-373-12 s SWITCH, SLIDE 1-554-399-00 s SWITCH, TOGGLE 1-553-252-00 s SWITCH, DIGITAL 1-554-027-00 s SWITCH, DIGITAL 1-570-514-11 s SWITCH, SLIDE
S103	1-554-027-00 s SWITCH, DIGITAL
TH1	1-800-071-11 s THERMISTER, S-300
VCO1 VCO2	1-577-089-11 s VCO, CRYSTAL 14.318180MHz 1-577-089-11 s, VCO, CRYSTAL 14.318180MHz

DA-63P B	OARD used for DFS-500P	(DA-63P BOARD used for DFS-500P)
Ref. No.	Part No. SP Description	Ref. No. or Q'ty Part No. SP Description
1pc	A-8271-692-A O MOUNTED CIRCUIT BOARD, DA-63P	C130 1-124-589-11 S ELECT 47uF 20% 16V
6pcs	2-280-622-21 O SUPPORT (M3X10), HEXAGON	C131 1-124-589-11 S ELECT 47uF 20% 16V
2pcs	3-166-184-01 O LEVER, PC BOARD	C132 1-124-589-11 S ELECT 47uF 20% 16V
2pcs	3-166-185-01 S NUT, PLATE	C201 1-124-589-11 S ELECT 47uF 20% 16V
1pc	3-178-157-01 O PLATE, SHIELD	C203 1-124-589-11 S ELECT 47uF 20% 16V
8pcs	4-886-821-11 s SCREW, S TIGHT, +PTTWH 3X6	C205 1-124-589-11 s ELECT 47uF 20% 16V
2pcs	7-622-207-05 s N 2.6, TYPE 2	C207 1-124-589-11 s ELECT 47uF 20% 16V
2pcs	7-626-320-11 s PIN, SPRING 3X8	C209 1-124-589-11 s ELECT 47uF 20% 16V
6pcs	7-628-254-40 s SCREW +PS 2.6X12	C215 1-124-589-11 s ELECT 47uF 20% 16V
12pcs	7-682-947-01 s SCREW +PSW 3X6	C217 1-124-589-11 s ELECT 47uF 20% 16V
C1	1-124-589-11 s ELECT 47uF 20% 16V	C219 1-124-589-11 s ELECT 47uF 20% 16V
C3	1-124-589-11 s ELECT 47uF 20% 16V	C221 1-124-589-11 s ELECT 47uF 20% 16V
C5	1-124-589-11 s ELECT 47uF 20% 16V	C223 1-124-589-11 s ELECT 47uF 20% 16V
C7	1-124-589-11 s ELECT 47uF 20% 16V	C225 1-124-589-11 s ELECT 47uF 20% 16V
C9	1-124-589-11 s ELECT 47uF 20% 16V	C227 1-124-589-11 s ELECT 47uF 20% 16V
C11	1-124-589-11 s ELECT 47uF 20% 16V	C229 1-124-589-11 s ELECT 47uF 20% 16V
C13	1-124-589-11 s ELECT 47uF 20% 16V	C301 1-124-589-11 s ELECT 47uF 20% 16V
C15	1-124-589-11 s ELECT 47uF 20% 16V	C303 1-124-589-11 s ELECT 47uF 20% 16V
C17	1-124-589-11 s ELECT 47uF 20% 16V	C306 1-163-235-11 s CERAMIC, CHIP 22PF 5% 50V
C19	1-124-282-00 s ELECT, NONPOLAR 22uF 20% 25V	C307 1-163-235-11 s CERAMIC, CHIP 22PF 5% 50V
C20	1-163-235-11 s CERAMIC, CHIP 22PF 5% 50V	C309 1-163-237-11 s CERAMIC, CHIP 27PF 5% 50V
C23	1-163-113-00 s CERAMIC, CHIP:68PF 5% 50V	C314 1-163-235-11 s CERAMIC, CHIP 22PF 5% 50V
C25	1-163-113-00 s CERAMIC, CHIP:68PF 5% 50V	C318 1-124-282-00 s ELECT, NONPOLAR 22uF 20% 25V
C26	1-124-589-11 s ELECT 47uF 20% 16V	C319 1-124-282-00 s ELECT, NONPOLAR 22uF 20% 25V
C28	1-163-251-11 s CERAMIC, CHIP 100PF 5% 50V	C320 1-124-589-11 s ELECT 47uF 20% 16V
C29	1-124-589-11 s ELECT 47uF 20% 16V	C322 1-124-589-11 s ELECT 47uF 20% 16V
C31	1-131-341-00 s TANTALUM 0.1uF 10% 35V	C324 1-163-235-11 s CERAMIC, CHIP 22PF 5% 50V
C32	1-124-589-11 s ELECT 47uF 20% 16V	C325 1-124-589-11 s ELECT 47uF 20% 16V
C34	1-124-589-11 s ELECT 47uF 20% 16V	C347 1-124-589-11 s ELECT 47uF 20% 16V
C36	1-124-589-11 s ELECT 47uF 20% 16V	C350 1-163-235-11 s CERAMIC, CHIP 22PF 5% 50V
C39	1-164-232-11 s CERAMIC 0.01uF 10% 100V	C401 1-124-589-11 s ELECT 47uF 20% 16V
C40	1-124-589-11 s ELECT 47uF 20% 16V	C403 1-124-589-11 s ELECT 47uF 20% 16V
C43	1-124-589-11 s ELECT 47uF 20% 16V	C405 1-162-638-11 s CERAMIC, CHIP 1uF 16V
C45	1-124-589-11 s ELECT 47uF 20% 16V	C406 1-131-374-00 s TANTALUM 33uF 10% 16V
C47	1-124-589-11 s ELECT 47uF 20% 16V	C407 1-163-227-11 s CERAMIC, CHIP 10PF 5% 50V
C50 C51 C53 C54 C55	1-163-235-11 s CERAMIC, CHIP 22PF 5% 50V 1-124-589-11 s ELECT 47uF 20% 16V	C411 1-162-638-11 s CERAMIC, CHIP 1UF 16V C412 1-131-374-00 s TANTALUM 33UF 10% 16V C413 1-163-227-11 s CERAMIC, CHIP 10PF 5% 50V C415 1-164-232-11 s CERAMIC 0.01UF 10% 100V C416 1-164-232-11 s CERAMIC 0.01UF 10% 100V
C57	1-124-589-11 s ELECT 47uF 20% 16V	C417 1-124-589-11 s ELECT 47uF 20% 16V
C59	1-124-589-11 s ELECT 47uF 20% 16V	C418 1-124-589-11 s ELECT 47uF 20% 16V
C62	1-164-232-11 s CERAMIC 0.01uF 10% 100V	C420 1-124-589-11 s ELECT 47uF 20% 16V
C65	1-163-251-11 s CERAMIC, CHIP 100PF 5% 50V	C424 1-124-589-11 s ELECT 47uF 20% 16V
C66	1-124-589-11 s ELECT 47uF 20% 16V	C426 1-124-589-11 s ELECT 47uF 20% 16V
C69	1-163-251-11 s CERAMIC, CHIP 100PF 5% 50V	C430 1-163-227-11 s CERAMIC, CHIP 10PF 5% 50V
C70	1-163-251-11 s CERAMIC, CHIP 100PF 5% 50V	C431 1-163-241-11 s CERAMIC, CHIP 39PF 5% 50V
C71	1-124-589-11 s ELECT 47uF 20% 16V	C432 1-163-227-11 s CERAMIC, CHIP 10PF 5% 50V
C77	1-163-251-11 s CERAMIC, CHIP 100PF 5% 50V	C433 1-124-589-11 s ELECT 47uF 20% 16V
C78	1-163-121-00 s CERAMIC, CHIP 150PF 5% 50V	C435 1-124-589-11 s ELECT 47uF 20% 16V
C80	1-163-251-11 s CERAMIC, CHIP 100PF 5% 50V	C437 1-124-589-11 S ELECT 47uF 20% 16V
C85	1-124-589-11 s ELECT 47uF 20% 16V	C439 1-124-589-11 S ELECT 47uF 20% 16V
C86	1-124-589-11 s ELECT 47uF 20% 16V	C501 1-124-589-11 S ELECT 47uF 20% 16V
C87	1-124-589-11 s ELECT 47uF 20% 16V	C503 1-124-589-11 S ELECT 47uF 20% 16V
C88	1-124-589-11 s ELECT 47uF 20% 16V	C505 1-124-589-11 S ELECT 47uF 20% 16V
C101	1-124-589-11 s ELECT 47uF 20% 16V	C507 1-124-589-11 s ELECT 47uF 20% 16V
C103	1-124-589-11 s ELECT 47uF 20% 16V	C509 1-124-589-11 s ELECT 47uF 20% 16V
C107	1-124-589-11 s ELECT 47uF 20% 16V	C511 1-124-589-11 s ELECT 47uF 20% 16V
C124	1-124-589-11 s ELECT 47uF 20% 16V	C513 1-124-589-11 s ELECT 47uF 20% 16V



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(DA-63P BOARD used for DFS-500P)
(DA-63P BOARD used for DFS-500P)
                                                                                                                                                                              Ref. No. or Q'ty Part No.
Ref. No.
                                                                                                                                                                                                                                       SP Description
or Q'ty Part No.
                                                   SP Description
                        1-124-589-11 s ELECT 47uF 20% 16V

1-124-589-11 s ELECT 47uF 20% 16V

1-124-589-11 s ELECT 47uF 20% 16V

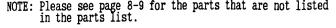
1-124-282-00 s ELECT, NONPOLAR 22uF 20% 25V

1-124-589-11 s ELECT 47uF 20% 16V
                                                                                                                                                                              C650
                                                                                                                                                                                                       1-163-099-00 s CERAMIC, CHIP 18PF 5% 50V
1-163-243-11 s CERAMIC, CHIP 47PF 5% 50V
1-124-282-00 s ELECT, NONPOLAR 22uF 20% 25V
                                                                                                                                                                              C658
C517
                                                                                                                                                                              C659
C519
C521
                                                                                                                                                                                                       1-506-748-11 0 CONNECTOR, DIN 96P, MALE
1-506-748-11 0 CONNECTOR, DIN 96P, MALE
1-506-748-11 0 CONNECTOR, DIN 96P, MALE
1-580-097-11 S CONNECTOR, PICL-S 50P, MALE
1-580-097-11 S CONNECTOR, PICL-S 50P, MALE
                                                                                                                                                                              CN1
                                                                                                                                                                              CN2
                         1-124-589-11 s ELECT 47uF 20% 16V
1-124-282-00 s ELECT, NONPOLAR 22uF 20% 25V
1-163-243-11 s CERAMIC, CHIP 47PF 5% 50V
1-163-243-11 s CERAMIC, CHIP 47PF 5% 50V
1-124-282-00 s ELECT, NONPOLAR 22uF 20% 25V
                                                                                                                                                                              CN3
 C527
                                                                                                                                                                              CN40
 C529
                                                                                                                                                                               CN50
 C530
 C533
                                                                                                                                                                                                       8-719-104-34 s DIODE 1S2835
8-719-800-76 s DIODE 1SS226
8-719-800-76 s DIODE 1SS226
 C534
                                                                                                                                                                              D2
                         1-124-589-11 s ELECT 47uF 20% 16V
1-124-589-11 s ELECT 47uF 20% 16V
1-164-232-11 s CERAMIC 0.01uF 10% 100V
1-163-222-11 s CERAMIC, CHIP 5PF 50V
1-163-087-00 s CERAMIC, CHIP 4PF 50V
                                                                                                                                                                              D3
 C535
                                                                                                                                                                              Ď4
                                                                                                                                                                                                        8-719-800-60 s LED TLR214, RED
 C537
 C539
                                                                                                                                                                                                        1-415-339-00 s DELAY LINE 300nS
1-415-502-11 s DELAY LINE 100nS
1-415-502-11 s DELAY LINE 100nS
                                                                                                                                                                              DL501
 C543
                                                                                                                                                                               DL503
 C544
                                                                                                                                                                               DL504
                         1-163-224-11 s CERAMIC 7PF 0.25PF 50V
1-163-224-11 s CERAMIC 7PF 0.25PF 50V
1-163-227-11 s CERAMIC, CHIP 10PF 5% 50V
1-124-589-11 s ELECT 47uF 20% 16V
1-124-589-11 s ELECT 47uF 20% 16V
 C545
                                                                                                                                                                                                        1-235-181-00 s FILTER, BANDPASS 4.43MHz
1-235-584-11 s FILTER, LOW-PASS
1-235-584-11 s FILTER, LOW-PASS
1-235-181-00 s FILTER, BANDPASS 4.43MHz
1-239-085-11 s FILTER, LOW-PASS
 C546
C547
                                                                                                                                                                               FL301
                                                                                                                                                                               FL302
  C549
                                                                                                                                                                                FL401
  C551
                                                                                                                                                                                FL501
                          1-163-087-00 s CERAMIC, CHIP 4PF 50V
1-163-227-11 s CERAMIC, CHIP 10PF 5% 50V
1-163-087-00 s CERAMIC, CHIP 4PF 50V
1-163-227-11 s CERAMIC, CHIP 10PF 5% 50V
1-124-589-11 s ELECT 47uF 20% 16V
  C553
                                                                                                                                                                                                        1-239-085-11 s FILTER, LOW-PASS
1-235-758-11 s FILTER, LOW-PASS
1-235-758-11 s FILTER, LOW-PASS
1-235-181-00 s FILTER, BANDPASS 4.43MHz
                                                                                                                                                                               FL502
 C554
C560
                                                                                                                                                                               FL503
FL504
  C561
                                                                                                                                                                               FL505
  C563
                          1-124-589-11 s ELECT 47uF 20% 16V
1-124-282-00 s ELECT, NONPOLAR 22uF 20% 25V
1-124-589-11 s ELECT 47uF 20% 16V
1-162-638-11 s CERAMIC, CHIP 1uF 16V
1-131-374-00 s TANTALUM 33uF 10% 16V
                                                                                                                                                                                                        8-759-520-06 s IC NJM7809FA
8-759-700-68 s IC NJM79L09A
8-759-231-53 s IC TA7805S
8-741-104-00 s IC BX1040
  C565
                                                                                                                                                                               IC2
  C567
                                                                                                                                                                               IC3
IC4
IC5
  C570
  C573
C574
                                                                                                                                                                                                         8-759-101-12 s IC UPC311G2
                           1-124-589-11 s ELECT 47uF 20% 16V
1-124-589-11 s ELECT 47uF 20% 16V
1-124-282-00 s ELECT, NONPOLAR 22uF 20% 25V
1-162-638-11 s CERAMIC, CHIP 1uF 16V
1-131-374-00 s TANTALUM 33uF 10% 16V
                                                                                                                                                                                                        8-752-335-47 s IC CXD1216M
8-741-129-10 s IC BX-1291
8-752-332-67 s IC CXD1217M
1-808-513-12 s IC IB-38
8-759-925-72 s IC SN74HC02NS
                                                                                                                                                                                IC7
  C577
                                                                                                                                                                                IC8
  C579
C584
                                                                                                                                                                               IC9
IC10
   C585
                                                                                                                                                                                                        8-759-948-28 s IC SM5828P
8-759-907-81 s IC SM74LS221NS
8-759-907-81 s IC SM74LS221NS
8-759-926-82 s IC SM74HC574ANS
8-759-926-82 s IC SM74HC574ANS
                            1-163-227-11 s CERAMIC, CHIP 10PF 5% 50V
1-163-227-11 s CERAMIC, CHIP 10PF 5% 50V
1-164-232-11 s CERAMIC 0.01uF 10% 100V
1-164-232-11 s CERAMIC 0.01uF 10% 100V
   C586
                                                                                                                                                                                IC12
IC13
IC14
   C587
   C589
   C590
                                                                                                                                                                                IC15
                            1-124-589-11 s ELECT 47uF 20% 16V
   C591
                                                                                                                                                                                                        8-759-926-82 s IC SN74HC574ANS
8-759-209-20 s IC TC4584BF
8-759-209-20 s IC TC4584BF
8-759-989-56 s IC SN74ALS244BNS
8-759-300-71 s IC HD14053BFP
                            1-124-589-11 s ELECT 47uF 20% 16V
1-124-589-11 s ELECT 47uF 20% 16V
1-164-232-11 s CERAMIC 0.01uF 10% 100V
1-163-227-11 s CERAMIC, CHIP 10PF 5% 50V
1-163-235-11 s CERAMIC, CHIP 22PF 5% 50V
   C592
                                                                                                                                                                                 IC17
   C594
                                                                                                                                                                                IC18
    C599
                                                                                                                                                                                 IC19
   C601
                                                                                                                                                                                IC20
   C605
                            1-124-589-11 s ELECT 47uF 20% 16V
1-124-589-11 s ELECT 47uF 20% 16V
1-164-232-11 s CERAMIC 0.01uF 10% 100V
1-124-589-11 s ELECT 47uF 20% 16V
1-124-589-11 s ELECT 47uF 20% 16V
                                                                                                                                                                                                         8-759-063-39 s IC CXD8267Q
8-759-063-39 s IC CXD8267Q
8-759-063-38 s IC CXD8276Q
8-759-063-38 s IC CXD8276Q
                                                                                                                                                                                 IC101
   C606
                                                                                                                                                                                 IC102
   C608
                                                                                                                                                                                 IC103
   C610
                                                                                                                                                                                IC104
   C614
                                                                                                                                                                                                         8-759-063-38 s IC CXD8276Q
                                                                                                                                                                                IC105
   C616
                                                                                                                                                                                                         8-759-926-82 s IC SN74HC574ANS
                            1-164-232-11 s CERAMIC 0.01uF 10% 100V
1-163-243-11 s CERAMIC, CHIP 47PF 5% 50V
1-124-589-11 s ELECT 47uF 20% 16V
1-124-589-11 s ELECT 47uF 20% 16V
1-164-232-11 s CERAMIC 0.01uF 10% 100V
                                                                                                                                                                                IC108
   C624
                                                                                                                                                                                IC109
   C630
                                                                                                                                                                                IC110
    C631
                                                                                                                                                                                 IC111
    C633
                                                                                                                                                                                IC112
    C635
                            1-124-589-11 s ELECT 47uF 20% 16V
1-124-589-11 s ELECT 47uF 20% 16V
1-163-243-11 s CERAMIC, CHIP 47PF 5% 50V
1-164-232-11 s CERAMIC 0.01uF 10% 100V
                                                                                                                                                                                                         8-759-063-38 s IC CXD8276Q
8-759-063-38 s IC CXD8276Q
8-759-063-38 s IC CXD8276Q
                                                                                                                                                                                IC114
   C637
                                                                                                                                                                               IC115
   C639
                                                                                                                                                                                IC116
   C643
                                                                                                                                                                                                         8-759-505-01 s IC CXD8054
    C646
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(DA-63P BOARD used for DFS-500P) (DA-63P BOARD used for DFS-500P) Ref. No. or Q'ty Part No. SP Description Ref. No. or Q'ty Part No. SP Description 8-759-926-82 s IC SN74HC574ANS 8-759-926-82 s IC SN74HC574ANS 8-759-982-25 s IC RC78L09A 8-759-708-05 s IC NJM78L05A 8-759-515-12 s IC SN74ALS574BNS 1-410-470-11 s INDUCTOR 10uH L9 L10 IC119 IC201 IC202 L11 IC203 L12 8-759-515-12 s IC SN74ALS574BNS 8-759-515-12 s IC SN74ALS574BNS 8-759-515-12 s IC SN74ALS574BNS 8-752-032-93 s IC CXA1260Q-Z 8-752-032-96 s IC CXA1106M 1-410-470-11 s INDUCTOR 10uH 1-412-525-31 s INDUCTOR 10uH IC204 L14 IC205 1-412-525-31 s INDUCTOR 10uH 1-412-525-31 s INDUCTOR 10uH L15 IC206 L101 IC207 1-410-470-11 s INDUCTOR 10uH 1,202 IC208 1-410-470-11 s INDUCTOR 10uH 8-759-906-59 s IC CX22017 8-759-702-07 s IC NJM13700M 8-759-520-06 s IC NJM7809FA 8-759-701-87 s IC NJM7909FA 8-759-231-53 s IC TA7805S L203 IC401 IC402 IC501 L204 L205 L206 IC502 L207 IC503 8-759-701-84 s IC NJM7905FA 8-759-984-88 s IC LM6361M 8-759-984-88 s IC LM6361M 8-759-984-88 s IC LM6361M 8-759-702-07 s IC NJM13700M L301 1-410-470-11 s INDUCTOR 10uH TC504 1-410-470-11 s INDUCTOR 10uH 1-410-478-11 s INDUCTOR 47uH 1-410-470-11 s INDUCTOR 10uH L302 IC505 L303 IC506 L401 IC507 L402 1-408-422-00 s INDUCTOR 120uH IC508 1-410-470-11 s INDUCTOR 10uH L403 8-741-135-60 s IC BX1356 8-741-135-60 S IC BX1356 8-741-135-60 S IC BX1356 8-741-135-60 S IC BX1356 8-759-984-88 S IC LM6361M 8-759-984-88 S IC LM6361M IC510 IC511 IC512 L404 L501 L502 IC513 1-410-470-11 s INDUCTOR 10uH 1-410-470-11 s INDUCTOR 10uH 1-408-422-00 s INDUCTOR 120uH 1-410-470-11 s INDUCTOR 10uH 8-759-906-59 s IC CX22017 8-759-702-07 s IC NJM13700M 8-752-052-73 s IC CXA1451M 8-759-984-88 s IC LM6361M L504 IC514 L505 IC516 IC517 L506 IC518 L507 8-752-052-73 s IC CXA1451M L508 1-410-470-11 s INDUCTOR 10uH IC519 ↑1-532-637-00 s LINK, IC 1.0A ↑1-532-685-00 s LINK, IC 0.6A ↑1-532-637-00 s LINK, IC 1.0A 8-759-984-88 S IC LM6361M 8-759-702-07 S IC NJM13700M 8-752-052-73 S IC CXA1451M 8-759-984-88 S IC LM6361M 8-752-052-73 S IC CXA1451M PS2 IC521 IC522 TC523 8-729-120-28 s TRANSISTOR 2SC1623-L5L6 8-729-112-65 s TRANSISTOR 2SA1462-Y33 8-729-120-28 s TRANSISTOR 2SC1623-L5L6 8-729-109-44 s TRANSISTOR 2SK94 8-729-120-28 s TRANSISTOR 2SC1623-L5L6 IC524 Q2 Q3 Q4 Q5 8-759-702-07 s IC NJM13700M 8-759-984-88 s IC LM6361M 8-759-989-56 s IC SN74ALS244BNS 8-759-989-56 s IC SN74ALS244BNS 8-759-989-56 s IC SN74ALS244BNS IC525 IC526 IC601 IC602 Q6 Q7 8-729-175-73 s TRANSISTOR 2SC2757 IC603 8-729-112-65 s TRANSISTOR 2SA1462-Y33 8-729-120-28 s TRANSISTOR 2SC1623-L5L6 8-729-109-44 s TRANSISTOR 2SK94 1-216-295-00 s METAL, CHIP 0 Q8 JR2 JR4 Q10 8-729-216-22 s TRANSISTOR 2SA1162 JR6 JR10 8-729-216-22 s TRANSISTOR 2SA1162 8-729-120-28 s TRANSISTOR 2SC1623-L5L6 Q201 1-216-295-00 s METAL, CHIP 0 8-729-120-28 s TRANSISTOR 2SC1623-L5L6 8-729-120-28 s TRANSISTOR 2SC1623-L5L6 8-729-120-28 s TRANSISTOR 2SC1623-L5L6 Q202 JR14 Q203 JR16 Q204 JR18 JR20 Q301 Q302 Q303 Q304 8-729-120-28 s TRANSISTOR 2SC1623-L5L6 8-729-120-28 s TRANSISTOR 2SC1623-L5L6 8-729-175-73 s TRANSISTOR 2SC2757 8-729-120-28 s TRANSISTOR 2SC1623-L5L6 1-216-295-00 s METAL, CHIP 0 JR402 1-410-470-11 s INDUCTOR 10uH 1-410-470-11 s INDUCTOR 10uH 1-410-470-11 s INDUCTOR 10uH 1-408-413-00 s INDUCTOR 20uH **Q**305 8-729-120-28 s TRANSISTOR 2SC1623-L5L6 L2 L3 8-729-120-28 s TRANSISTOR 2SC1623-L5L6 8-729-216-22 s TRANSISTOR 2SA1162 8-729-120-28 s TRANSISTOR 2SC1623-L5L6 8-729-175-73 s TRANSISTOR 2SC2757 8-729-216-22 s TRANSISTOR 2SA1162 9306 Q307 L4 0308 0309 1-408-413-00 s INDUCTOR 22uH 1-410-470-11 s INDUCTOR 10uH 1-410-470-11 s INDUCTOR 10uH



(DA-63P BOARD used for DFS-500P) (DA-63P BOARD used for DFS-500P)		
Ref. No. or Q'ty Part No. SP Description	Ref. No. or Q'ty Part No. SP Description	
Q312 8-729-120-28 S TRANSISTOR 2SC1623-L5L6 Q313 8-729-175-73 S TRANSISTOR 2SC2757 Q315 8-729-216-22 S TRANSISTOR 2SA1162 Q316 8-729-120-28 S TRANSISTOR 2SC1623-L5L6 Q401 8-729-120-28 S TRANSISTOR 2SC1623-L5L6	Q535 8-729-120-28 S TRANSISTOR 2SC1623-L5L6 Q536 8-729-112-65 S TRANSISTOR 2SA1462-Y33 Q537 8-729-216-22 S TRANSISTOR 2SA1162 Q538 8-729-216-22 S TRANSISTOR 2SA1162 Q540 8-729-120-28 S TRANSISTOR 2SC1623-L5L6	
Q402 8-729-120-28 S TRANSISTOR 2SC1623-L5L6 Q403 8-729-112-65 S TRANSISTOR 2SA1462-Y33 Q404 8-729-120-28 S TRANSISTOR 2SC1623-L5L6 Q405 8-729-112-65 S TRANSISTOR 2SA1462-Y33 Q406 8-729-216-22 S TRANSISTOR 2SA1162	Q541 8-729-116-64 S TRANSISTOR 2SK508-K51 Q542 8-729-112-65 S TRANSISTOR 2SA1462-Y33 Q545 8-729-175-73 S TRANSISTOR 2SC2757 Q546 8-729-216-22 S TRANSISTOR 2SA1162 Q548 8-729-116-64 S TRANSISTOR 2SK508-K51	
Q407 8-729-216-22 S TRANSISTOR 2SA1162 Q408 8-729-120-28 S TRANSISTOR 2SC1623-L5L6 Q409 8-729-120-28 S TRANSISTOR 2SC1623-L5L6 Q410 8-729-120-28 S TRANSISTOR 2SC1623-L5L6 Q411 8-729-120-28 S TRANSISTOR 2SC1623-L5L6	Q549 8-729-112-65 s TRANSISTOR 2SA1462-Y33 Q551 8-729-216-22 s TRANSISTOR 2SA1162 Q553 8-729-116-64 s TRANSISTOR 2SK508-K51 Q554 8-729-112-65 s TRANSISTOR 2SA1462-Y33 Q556 8-729-216-22 s TRANSISTOR 2SA1162	
Q413 8-729-120-28 S TRANSISTOR 2SC1623-L5L6 Q414 8-729-116-64 S TRANSISTOR 2SK508-K51 Q415 8-729-112-65 S TRANSISTOR 2SA1462-Y33 Q416 8-729-112-65 S TRANSISTOR 2SA1462-Y33 Q417 8-729-112-65 S TRANSISTOR 2SA1462-Y33	Q557 8-729-175-73 S TRANSISTOR 2SC2757 Q558 8-729-216-22 S TRANSISTOR 2SA1162 Q560 8-729-116-64 S TRANSISTOR 2SK508-K51 Q561 8-729-112-65 S TRANSISTOR 2SA1462-Y33 Q563 8-729-216-22 S TRANSISTOR 2SA1162	
Q418 8-729-175-73 S TRANSISTOR 2SC2757 Q419 8-729-175-73 S TRANSISTOR 2SC2757 Q420 8-729-175-73 S TRANSISTOR 2SC2757 Q421 8-729-175-73 S TRANSISTOR 2SC2757 Q422 8-729-170-28 S TRANSISTOR 2SC2757	Q564 8-729-175-73 s TRANSISTOR 2SC2757 Q565 8-729-216-22 s TRANSISTOR 2SA1162 Q567 8-729-116-64 s TRANSISTOR 2SK508-K51 Q568 8-729-112-65 s TRANSISTOR 2SA1462-Y33 Q572 8-729-120-28 s TRANSISTOR 2SC1623-L5L6	
Q423 8-729-120-28 S TRANSISTOR 2SC1623-L5L6 Q424 8-729-112-65 S TRANSISTOR 2SA1462-Y33 Q425 8-729-216-22 S TRANSISTOR 2SA1162 Q426 8-729-216-22 S TRANSISTOR 2SA1162 Q427 8-729-120-28 S TRANSISTOR 2SC1623-L5L6	Q573 8-729-216-22 S TRANSISTOR 2SA1162 Q574 8-729-120-28 S TRANSISTOR 2SC1623-L5L6 Q577 8-729-175-73 S TRANSISTOR 2SC2757 Q578 8-729-216-22 S TRANSISTOR 2SA1162	
Q423 8-729-120-28 S TRANSISTOR 2SC1623-L5L6 Q424 8-729-112-65 S TRANSISTOR 2SA1462-Y33 Q425 8-729-216-22 S TRANSISTOR 2SA1162 Q426 8-729-216-22 S TRANSISTOR 2SA1162 Q427 8-729-120-28 S TRANSISTOR 2SC1623-L5L6 Q501 8-729-120-28 S TRANSISTOR 2SC1623-L5L6 Q502 8-729-120-28 S TRANSISTOR 2SC1623-L5L6 Q503 8-729-120-28 S TRANSISTOR 2SC1623-L5L6 Q504 8-729-120-28 S TRANSISTOR 2SC1623-L5L6 Q505 8-729-120-28 S TRANSISTOR 2SC1623-L5L6 Q506 8-729-120-28 S TRANSISTOR 2SC1623-L5L6 Q507 8-729-120-28 S TRANSISTOR 2SC1623-L5L6 Q508 8-729-120-28 S TRANSISTOR 2SC1623-L5L6 Q508 8-729-216-22 S TRANSISTOR 2SC1623-L5L6 Q508 8-729-216-22 S TRANSISTOR 2SC1623-L5L6 Q508 8-729-216-22 S TRANSISTOR 2SA1162 Q512 8-729-216-22 S TRANSISTOR 2SA1162	R2 1-216-691-11 s METAL, CHIP 47K 0.5% 1/10W R7 1-216-615-11 s METAL, CHIP 33 0.5% 1/10W R8 1-218-776-11 s METAL 1M 0.5% 1/10W R10 1-216-683-11 s METAL, CHIP 22K 0.5% 1/10W R13 1-216-695-11 s METAL, CHIP 68K 0.5% 1/10W	
Q514 8-729-216-22 s TRANSISTOR 2SA1162	R14 1-216-623-11 s METAL, CHIP 68 0.5% 1/10W R23 1-216-691-11 s METAL, CHIP 47K 0.5% 1/10W R24 1-216-691-11 s METAL, CHIP 47K 0.5% 1/10W R26 1-216-649-11 s METAL, CHIP 820 0.5% 1/10W R27 1-216-649-11 s METAL, CHIP 820 0.5% 1/10W	
Q516 8-729-116-64 S TRANSISTOR 2SK508-K51 Q517 8-729-112-65 S TRANSISTOR 2SA1462-Y33 Q518 8-729-175-73 S TRANSISTOR 2SC2757 Q519 8-729-175-73 S TRANSISTOR 2SC2757	R28 1-216-642-11 s METAL, CHIP 430 0.5% 1/10W R31 1-216-663-11 s METAL, CHIP 3.3% 0.5% 1/10W R36 1-216-687-11 s METAL, CHIP 33% 0.5% 1/10W R38 1-216-623-11 s METAL, CHIP 68 0.5% 1/10W R39 1-216-663-11 s METAL, CHIP 3.3% 0.5% 1/10W	
Q521 8-729-120-28 S TRANSISTOR 2SC1623-L5L6 Q522 8-729-120-28 S TRANSISTOR 2SC1623-L5L6 Q523 8-729-120-28 S TRANSISTOR 2SC1623-L5L6 Q524 8-729-216-22 S TRANSISTOR 2SC1623-L5L6	R41 1-216-683-11 s METAL, CHIP 22K 0.5% 1/10W R44 1-216-679-11 s METAL, CHIP 15K 0.5% 1/10W R45 1-216-663-11 s METAL, CHIP 3.3K 0.5% 1/10W R48 1-216-683-11 s METAL, CHIP 22K 0.5% 1/10W R49 1-216-647-11 s METAL, CHIP 680 0.5% 1/10W	
Q525 8-729-216-22 S TRANSISTOR 2SA1162 Q526 8-729-175-73 S TRANSISTOR 2SC2757 Q527 8-729-175-73 S TRANSISTOR 2SC2757 Q528 8-729-120-28 S TRANSISTOR 2SC1623-L5L6 Q529 8-729-112-65 S TRANSISTOR 2SA1462-Y33 Q530 8-729-120-28 S TRANSISTOR 2SC1623-L5L6	R53 1-216-671-11 S METAL, CHIP 6.8K 0.5% 1/10W R208 1-216-647-11 S METAL, CHIP 680 0.5% 1/10W R209 1-216-655-11 S METAL, CHIP 1.5K 0.5% 1/10W R210 1-216-647-11 S METAL, CHIP 1.5K 0.5% 1/10W R211 1-216-655-11 S METAL, CHIP 1.5K 0.5% 1/10W	
Q531 8-729-120-28 S TRANSISTOR 2SC1623-L5L6 Q532 8-729-216-22 S TRANSISTOR 2SA1162 Q533 8-729-175-73 S TRANSISTOR 2SC2757 Q534 8-729-175-73 S TRANSISTOR 2SC2757	R302 1-216-669-11 S METAL, CHIP 5.6K 0.5% 1/10W R305 1-216-669-11 S METAL, CHIP 5.6K 0.5% 1/10W R309 1-216-641-11 S METAL, CHIP 390 0.5% 1/10W R310 1-216-641-11 S METAL, CHIP 390 0.5% 1/10W R312 1-216-669-11 S METAL, CHIP 5.6K 0.5% 1/10W	





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(DA-63P BOARD used for DFS-500P)
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Ref. No. or Q'ty Part No.
                                                 SP Description
                     1-216-640-11 s METAL, CHIP 360 0.5% 1/10W 1-216-655-11 s METAL, CHIP 1.5% 0.5% 1/10W 1-216-643-11 s METAL, CHIP 470 0.5% 1/10W 1-216-663-11 s METAL, CHIP 3.3% 0.5% 1/10W 1-216-687-11 s METAL, CHIP 3.3% 0.5% 1/10W
R750
R756
R759
R761
                      1-216-663-11 s METAL, CHIP 3.3K 0.5% 1/10W 1-216-663-11 s METAL, CHIP 3.3K 0.5% 1/10W 1-216-647-11 s METAL, CHIP 680 0.5% 1/10W 1-215-394-00 s METAL 75 1% 1/6W 1-216-640-11 s METAL, CHIP 360 0.5% 1/10W
R770
R772
 R776
 R778
                      1-216-640-11 s METAL, CHIP 360 0.5% 1/10W 1-215-394-00 s METAL 75 1% 1/6W 1-215-394-00 s METAL 75 1% 1/6W 1-215-394-00 s METAL 75 1% 1/6W
 R779
 R780
R781
R782
                      1-216-643-11 s METAL, CHIP 470 0.5% 1/10W
 R797
                      1-216-669-11 s METAL, CHIP 5.6K 0.5% 1/10W 1-216-669-11 s METAL, CHIP 5.6K 0.5% 1/10W 1-216-655-11 s METAL, CHIP 1.5K 0.5% 1/10W 1-216-643-11 s METAL, CHIP 470 0.5% 1/10W
 R798
 R799
 R808
 R811
                      1-231-411-00 s RESISTOR BLOCK 100Kx8
1-231-411-00 s RESISTOR BLOCK 100Kx8
 RB102
                      1-231-411-00 s RESISTOR BLOCK 100Kx8
1-231-411-00 s RESISTOR BLOCK 100Kx8
 RB103
 RB104
                      1-231-411-00 s RESISTOR BLOCK 100Kx8
 RB105
                       1-231-411-00 s RESISTOR BLOCK 100Kx8
 RB106
                      1-231-411-00 S RESISTOR BLOCK 100Kx8
 RB107
 RB108
  RB109
  RB110
                        1-231-411-00 s RESISTOR BLOCK 100Kx8
                       1-231-411-00 s RESISTOR BLOCK 100Kx8
 RB111
                       1-231-411-00 S RESISTOR BLOCK 100Kx8
  RB112
  RB113
  RB114
                        1-231-411-00 s RESISTOR BLOCK 100Kx8
  RB115
                       1-231-385-00 s RESISTOR BLOCK 4.7Kx8
1-231-385-00 s RESISTOR BLOCK 4.7Kx8
1-231-385-00 s RESISTOR BLOCK 4.7Kx8
  RB202
  RB203
  RB204
                        1-231-385-00 s RESISTOR BLOCK 4.7Kx8
  RB205
                       1-228-993-00 s RES, ADJ METAL 4.7K
1-237-503-21 s RES, ADJ METAL 10K
1-237-502-21 s RES, ADJ METAL 5K
1-228-995-00 s RES, ADJ METAL 22K
1-228-995-00 s RES, ADJ METAL 22K
  RV1
  RV2
  ŘV3
  RV4
  RV5
                        1-228-995-00 s RES, ADJ METAL 22K
  RV6
                       1-228-995-00 S RES, ADJ METAL 22K
1-228-995-00 S RES, ADJ METAL 22K
1-228-994-00 S RES, ADJ METAL 10K
1-228-994-00 S RES, ADJ METAL 10K
  RV7
  RV8
  RV9
  RV10
                       1-237-501-21 s RES, ADJ METAL 2K
1-228-989-00 s RES, ADJ METAL 470
1-228-990-00 s RES, ADJ METAL 1K
1-228-993-00 s RES, ADJ METAL 4.7K
1-228-993-00 s RES, ADJ METAL 4.7K
  RV11
 RV301
RV401
RV402
  RV403
                       1-237-500-21 s RES, ADJ METAL 1K
1-228-990-00 s RES, ADJ METAL 1K
1-228-993-00 s RES, ADJ METAL 4.7K
1-228-991-00 s RES, ADJ METAL 2.2K
1-237-500-21 s RES, ADJ METAL 1K
  RV404
  RV406
  RV 504
 RV 506
  RV507
```

(DA-63P BOARD used for DFS-500P)

Ref. No. or Q'ty	Part No. SP Des	cription
RV508 RV509 RV511 RV512 RV513	1-237-500-21 s RES 1-237-500-21 s RES 1-228-993-00 s RES 1-228-991-00 s RES 1-228-993-00 s RES	, ADJ METAL 1K , ADJ METAL 1K , ADJ METAL 4.7K , ADJ METAL 2.2K , ADJ METAL 4.7K
RV514 RV515 RV516 RV518 RV520	1-228-993-00 s RES 1-228-989-00 s RES 1-237-501-21 s RES 1-228-990-00 s RES 1-237-501-21 s RES	, ADJ METAL 4.7K , ADJ METAL 470 , ADJ METAL 2K , ADJ METAL 1K , ADJ METAL 2K
RV521 RV522 RV523 RV524 RV525	1-228-989-00 s RES 1-237-501-21 s RES 1-228-989-00 s RES 1-237-501-21 s RES 1-228-990-00 s RES	, ADJ METAL 470 , ADJ METAL 2K , ADJ METAL 470 , ADJ METAL 2K , ADJ METAL 1K
	1-228-989-00 s RES	
	1-570-373-12 s SW1 1-554-399-00 s SW1 1-553-252-00 s SW1 1-554-027-00 s SW1 1-570-514-11 s SW1	
S103	1-554-027-00 s SW	TCH, DIGITAL
	1-800-071-11 s THE	
VC01 VC02	1-577-295-11 s VCC 1-577-294-11 s VCC), CRYSTAL 17.734475MHz), CRYSTAL 14.187500MHz

FM-29/FM-29P BOARD (FM-29/FM-29P BOARD)	
Ref. No. or Q'ty Part No. SP Description	Ref. No. or Q'ty Part No. SP Description
or Q'ty Part No. SP Description 1pc A-8271-684-A o MOUNTED CIRCUIT BAORD, FM-29 (for DFS-500) 1pc A-8271-693-A o MOUNTED CIRCUIT BOARD, FM-29P (for DFS-500P) 2pcs 3-166-184-01 o LEVER, PC BOARD	C48 1-161-055-00 s CERAMIC 0.022uF 10% 50V C49 1-161-055-00 s CERAMIC 0.022uF 10% 50V C50 1-161-055-00 s CERAMIC 0.022uF 10% 50V C51 1-161-055-00 s CERAMIC 0.022uF 10% 50V C52 1-161-055-00 s CERAMIC 0.022uF 10% 50V C52
2pcs 3-166-185-01 s NUT, PLATE 1pc 3-178-157-01 o PLATE, SHIELD 8pcs 4-886-821-11 s SCREW, S TIGHT, +PTTWH 3X6 2pcs 7-622-207-05 s N 2.6, TYPE 2	C53 1-161-055-00 s CERAMIC 0.022uF 10% 50V C54 1-161-055-00 s CERAMIC 0.022uF 10% 50V C55 1-161-055-00 s CERAMIC 0.022uF 10% 50V C56 1-161-055-00 s CERAMIC 0.022uF 10% 50V
2pcs 7-626-320-11 s PIN, SPRING 3X8 6pcs 7-628-254-40 s SCREW +PS 2.6X12	C58 1-161-055-00 s CERAMIC 0.022uF 10% 50V C59 1-161-055-00 s CERAMIC 0.022uF 10% 50V
C1 1-161-055-00 s CERAMIC 0.022uF 10% 50V C2 1-161-055-00 s CERAMIC 0.022uF 10% 50V C3 1-161-055-00 s CERAMIC 0.022uF 10% 50V C4 1-161-055-00 s CERAMIC 0.022uF 10% 50V	C60 1-161-055-00 S CERAMIC 0.022uF 10% 50V C61 1-161-055-00 S CERAMIC 0.022uF 10% 50V C62 1-161-055-00 S CERAMIC 0.022uF 10% 50V
2pcs 7-626-320-11 s PIN, SPRING 3X8 6pcs 7-628-254-40 s SCREW +PS 2.6X12 C1 1-161-055-00 s CERAMIC 0.022uF 10% 50V C2 1-161-055-00 s CERAMIC 0.022uF 10% 50V C3 1-161-055-00 s CERAMIC 0.022uF 10% 50V C4 1-161-055-00 s CERAMIC 0.022uF 10% 50V C5 1-161-055-00 s CERAMIC 0.022uF 10% 50V C6 1-161-055-00 s CERAMIC 0.022uF 10% 50V C7 1-161-055-00 s CERAMIC 0.022uF 10% 50V C8 1-161-055-00 s CERAMIC 0.022uF 10% 50V C9 1-161-055-00 s CERAMIC 0.022uF 10% 50V C9 1-161-055-00 s CERAMIC 0.022uF 10% 50V	C63 1-161-055-00 s CERAMIC 0.022uF 10% 50V C64 1-161-055-00 s CERAMIC 0.022uF 10% 50V C65 1-161-055-00 s CERAMIC 0.022uF 10% 50V C66 1-161-055-00 s CERAMIC 0.022uF 10% 50V C67 1-161-055-00 s CERAMIC 0.022uF 10% 50V
C11 1-161-055-00 S CERAMIC 0.022uF 10% 50V C12 1-161-055-00 S CERAMIC 0.022uF 10% 50V	C69 1-161-055-00 s CERAMIC 0.022uF 10% 50V C70 1-161-055-00 s CERAMIC 0.022uF 10% 50V C71 1-161-055-00 s CERAMIC 0.022uF 10% 50V C72 1-151-055-00 s CERAMIC 0.022uF 10% 50V
C14 1-161-055-00 s CERAMIC 0.022uF 10% 50V C15 1-161-055-00 s CERAMIC 0.022uF 10% 50V C16 1-161-055-00 s CERAMIC 0.022uF 10% 50V C17 1-161-772-11 s CERAMIC 0.1uF 10% 25V C18 1-161-772-11 s CERAMIC 0.1uF 10% 25V C19 1-161-772-11 s CERAMIC 0.1uF 10% 25V	C73 1-161-055-00 s CERAMIC 0.022uF 10% 50V C74 1-161-055-00 s CERAMIC 0.022uF 10% 50V C75 1-161-055-00 s CERAMIC 0.022uF 10% 50V C76 1-161-055-00 s CERAMIC 0.022uF 10% 50V C77 1-161-055-00 s CERAMIC 0.022uF 10% 50V
C20 1-161-772-11 S CERAMIC 0.1uF 10% 25V C21 1-161-772-11 S CERAMIC 0.1uF 10% 25V C22 1-161-772-11 S CERAMIC 0.1uF 10% 25V C23 1-161-055-00 S CERAMIC 0.022uF 10% 50V	C78
C25 1-161-055-00 s CERAMIC 0.022uF 10% 50V C26 1-161-055-00 s CERAMIC 0.022uF 10% 50V C27 1-161-055-00 s CERAMIC 0.022uF 10% 50V C28 1-161-055-00 s CERAMIC 0.022uF 10% 50V C29 1-161-055-00 s CERAMIC 0.022uF 10% 50V	C83 1-161-055-00 s CERAMIC 0.022uF 10% 50V C84 1-161-055-00 s CERAMIC 0.022uF 10% 50V C85 1-161-772-11 s CERAMIC 0.1uF 10% 25V C86 1-161-055-00 s CERAMIC 0.022uF 10% 50V C87 1-161-055-00 s CERAMIC 0.022uF 10% 50V
C30 1-161-055-00 s CERAMIC 0.022uF 10% 50V C31 1-161-055-00 s CERAMIC 0.022uF 10% 50V C32 1-161-055-00 s CERAMIC 0.022uF 10% 50V C33 1-161-055-00 s CERAMIC 0.022uF 10% 50V C34 1-161-055-00 s CERAMIC 0.022uF 10% 50V	C88 1-161-055-00 s CERAMIC 0.022uF 10% 50V C89 1-161-055-00 s CERAMIC 0.022uF 10% 50V C90 1-161-772-11 s CERAMIC 0.1uF 10% 25V C91 1-161-055-00 s CERAMIC 0.022uF 10% 50V C92 1-161-772-11 s CERAMIC 0.1uF 10% 25V
C35 1-161-055-00 s CERAMIC 0.022uF 10% 50V C36 1-161-055-00 s CERAMIC 0.022uF 10% 50V C37 1-161-055-00 s CERAMIC 0.022uF 10% 50V C38 1-161-055-00 s CERAMIC 0.022uF 10% 50V	C93 1-161-055-00 s CERAMIC 0.022uF 10% 50V C94 1-161-055-00 s CERAMIC 0.022uF 10% 50V C95 1-161-055-00 s CERAMIC 0.022uF 10% 50V C96 1-161-055-00 s CERAMIC 0.022uF 10% 50V C97 1-161-055-00 s CERAMIC 0.022uF 10% 50V
C39 1-161-772-11 s CERAMIC 0.1uF 10% 25V C40 1-161-772-11 s CERAMIC 0.1uF 10% 25V C41 1-161-772-11 s CERAMIC 0.1uF 10% 25V C42 1-161-772-11 s CERAMIC 0.1uF 10% 25V C43 1-161-772-11 s CERAMIC 0.1uF 10% 25V	C98 1-161-772-11 S CERAMIC 0.1uF 10% 25V C99 1-161-772-11 S CERAMIC 0.1uF 10% 25V C100 1-161-055-00 S CERAMIC 0.022uF 10% 50V C101 1-161-772-11 S CERAMIC 0.1uF 10% 25V C102 1-161-055-00 S CERAMIC 0.022uF 10% 50V
C44 1-161-772-11 S CERAMIC 0.1uF 10% 25V C45 1-161-055-00 S CERAMIC 0.022uF 10% 50V C46 1-161-055-00 S CERAMIC 0.022uF 10% 50V C47 1-161-055-00 S CERAMIC 0.022uF 10% 50V	C103 1-161-055-00 s CERAMIC 0.022uF 10% 50V C104 1-161-055-00 s CERAMIC 0.022uF 10% 50V C105 1-161-055-00 s CERAMIC 0.022uF 10% 50V C106 1-161-055-00 s CERAMIC 0.022uF 10% 50V



(FM-29/FM-29P BOARD) (FM-29/FM-29P BOARD)	
Ref. No. or Q'ty Part No. SP Description	Ref. No. or Q'ty Part No. SP Description
C107 1-161-055-00 s CERAMIC 0.022uF 10% 50V C108 1-161-055-00 s CERAMIC 0.022uF 10% 50V C109 1-161-772-11 s CERAMIC 0.1uF 10% 25V C110 1-161-772-11 s CERAMIC 0.1uF 10% 25V C111 1-161-772-11 s CERAMIC 0.1uF 10% 25V	IC23 8-759-989-55 s IC SN74ALS244BN IC24 8-759-900-69 s IC SN74ALS74AN IC25 8-759-945-78 s IC SN74ALS11AN IC26 8-759-904-18 s IC SN74ALS00AN IC27 8-759-936-54 s IC SN74ALS175N
C112 1-161-772-11 s CERAMIC 0.1uF 10% 25V C113 1-161-772-11 s CERAMIC 0.1uF 10% 25V C114 1-161-055-00 s CERAMIC 0.022uF 10% 50V C115 1-161-055-00 s CERAMIC 0.022uF 10% 50V C116 1-161-055-00 s CERAMIC 0.022uF 10% 50V	IC28 8-759-515-08 s IC SN74ALS374AN IC29 8-759-904-18 s IC SN74ALS00AN IC30 8-752-304-30 s IC CX23043 IC31 8-759-912-05 s IC SN74ALS161BN IC32 8-759-515-08 s IC SN74ALS374AN
C117 1-161-055-00 s CERAMIC 0.022uF 10% 50V C118 1-161-055-00 s CERAMIC 0.022uF 10% 50V C119 1-161-055-00 s CERAMIC 0.022uF 10% 50V C120 1-161-055-00 s CERAMIC 0.022uF 10% 50V C121 1-161-772-11 s CERAMIC 0.1uF 10% 25V	IC33 8-759-903-74 s IC SN74LS374N IC34 8-759-916-01 s IC SN74ALS153N IC35 8-759-901-94 s IC SN74LS194AN IC36 8-759-901-94 s IC SN74LS194AN IC37 8-759-901-94 s IC SN74LS194AN
C122 1-124-584-00 s ELECT 100uF 20% 10V C123 1-124-584-00 s ELECT 100uF 20% 10V C124 1-161-772-11 s CERAMIC 0.1uF 10% 25V C125 1-124-584-00 s ELECT 100uF 20% 10V C126 1-124-584-00 s ELECT 100uF 20% 10V	
C127 1-124-584-00 s ELECT 100uF 20% 10V C128 1-124-584-00 s ELECT 100uF 20% 10V C129 1-124-584-00 s ELECT 100uF 20% 10V C130 1-161-055-00 s CERAMIC 0.022uF 10% 50V C131 1-161-055-00 s CERAMIC 0.022uF 10% 50V	IC43 8-752-340-75 s IC CXK1206AM IC44 8-752-340-75 s IC CXK1206AM IC45 8-759-989-55 s IC SN74ALS244BN IC46 8-759-989-55 s IC SN74ALS244BN IC47 8-759-989-55 s IC SN74ALS244BN
C201 1-161-055-00 s CERAMIC 0.022uF 10% 50V C202 1-161-055-00 s CERAMIC 0.022uF 10% 50V C203 1-161-055-00 s CERAMIC 0.022uF 10% 50V C204 1-161-055-00 s CERAMIC 0.022uF 10% 50V C205 1-161-055-00 s CERAMIC 0.022uF 10% 50V	IC48 8-759-989-55 s IC SN74ALS244BN IC49 8-759-989-55 s IC SN74ALS244BN IC50 8-759-912-03 s IC SN74ALS138N IC51 8-759-912-03 s IC SN74ALS138N IC52 8-759-983-24 s IC CXD8033Q
C206 1-161-055-00 s CERAMIC 0.022uF 10% 50V CN13 1-506-748-11 o CONNECTOR, DIN 96P, MALE CN14 1-506-748-11 o CONNECTOR, DIN 96P, MALE CN15 1-506-748-11 o CONNECTOR, DIN 96P, MALE	IC53 8-759-936-54 S IC SN74ALS175N IC54 8-759-936-54 S IC SN74ALS175N IC55 8-759-946-64 S IC SN74ALS04BN IC56 8-759-904-18 S IC SN74ALS00AN IC57 8-759-055-72 S IC SN74ALS21AN
CNI107 1-540-080-11 s SOCKET, IC (IC113) 68P IC1 8-759-989-55 s IC SN74ALS244BN IC2 8-759-900-69 s IC SN74ALS74AN IC3 8-759-945-78 s IC SN74ALS11AN IC4 8-759-904-18 s IC SN74ALS00AN	IC58 8-759-925-08 s IC SN74ALS174N IC59 8-759-912-05 s IC SN74ALS161BN IC60 8-759-515-08 s IC SN74ALS374AN IC61 8-759-916-01 s IC SN74ALS153N IC62 8-759-916-01 s IC SN74ALS153N IC63 8-759-946-64 s IC SN74ALS04BN
IC5 8-759-936-54 s IC SN74ALS175N IC6 8-759-515-08 s IC SN74ALS374AN IC7 8-759-904-18 s IC SN74ALS00AN IC8 8-752-304-30 s IC CX23043 IC9 8-759-912-05 s IC SN74ALS161BN	IC64 8-759-904-38 s IC SN74ALS32N IC65 8-759-904-38 s IC SN74ALS32N IC66 8-759-904-38 s IC SN74ALS32N IC67 8-759-515-08 s IC SN74ALS374AN
IC10 8-759-515-08 s IC SN74ALS374AN IC11 8-759-903-74 s IC SN74LS374N IC12 8-759-916-01 s IC SN74ALS153N IC13 8-759-901-94 s IC SN74LS194AN IC14 8-759-901-94 s IC SN74LS194AN	IC68 8-759-515-08 s IC SN74ALS374AN IC69 8-759-925-08 s IC SN74ALS174N IC70 8-759-515-08 s IC SN74ALS374AN IC71 8-759-925-08 s IC SN74ALS174N IC72 8-759-925-08 s IC SN74ALS174N
IC15 8-759-901-94 s IC SN74LS194AN IC16 8-759-901-94 s IC SN74LS194AN IC17 8-752-340-75 s IC CXK1206AM IC18 8-752-340-75 s IC CXK1206AM IC19 8-752-340-75 s IC CXK1206AM	IC73 8-759-912-03 s IC SN74ALS138N IC74 8-759-912-03 s IC SN74ALS138N IC75 8-759-989-55 s IC SN74ALS244BN IC76 8-759-989-55 s IC SN74ALS244BN IC77 8-759-063-42 s IC CXD8264Q
IC 20 8-752-340-75 s IC CXK1206AM IC 21 8-752-340-75 s IC CXK1206AM IC 22 8-752-340-75 s IC CXK1206AM	IC78 8-759-989-55 s IC SN74ALS244BN IC79 8-759-989-55 s IC SN74ALS244BN IC80 8-752-322-06 s IC CXK5814P-35 IC81 8-752-322-06 s IC CXK5814P-35

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(FM-29/FM-29P BOARD)
(FM-29/FM-29P BOARD)
                                                                                                                                                                         Ref. No. or Q'ty Part No.
Ref. No. or Q'ty Part No.
                                                         SP Description
                       8-759-500-72 s IC SN74ALS157AN
8-759-500-72 s IC SN74ALS157AN
8-759-989-55 s IC SN74ALS244BN
8-752-322-06 s IC CXK5814P-35
8-759-515-08 s IC SN74ALS374AN
                                                                                                                                                                                                  1-554-027-00 s SWITCH, DIGITAL
TC82
IC83
 IC84
 IC85
 IC86
                        8-759-515-08 s IC SN74ALS374AN
8-759-515-08 s IC SN74ALS374AN
8-759-989-55 s IC SN74ALS244BN
8-752-322-06 s IC CXK5814P-35
8-759-989-55 s IC SN74ALS244BN
 IC87
 IC88
 IC89
 IC90
 IC91
                         8-752-322-06 s IC CXK5814P-35
8-759-901-94 s IC SN74LS194AN
8-759-901-94 s IC SN74LS194AN
8-759-901-94 s IC SN74LS194AN
8-759-901-94 s IC SN74LS194AN
 IC92
 IC93
 IC94
 IC95
 IC96
                         8-759-989-55 s IC SN74ALS244BN
8-752-340-75 s IC CXK1206AM
8-752-340-75 s IC CXK1206AM
8-759-515-08 s IC SN74ALS374AN
8-752-340-75 s IC CXK1206AM
 IC97
  IC98
  IC99
  IC100
 IC101
                         8-759-925-08 s IC SN74ALS174N
8-759-925-08 s IC SN74ALS174N
8-759-990-59 s IC N74F377N
8-759-990-59 s IC N74F377N
8-759-904-26 s IC SN74ALS08N
 IC102
  IC103
  IC104
  IC105
  IC106
                         8-759-999-42 s IC CXD8070K
8-759-063-38 s IC CXD8276Q
8-752-340-57 s IC CXK1203Q
8-752-340-57 s IC CXK1203Q
8-752-340-57 s IC CXK1203Q
  IC107
  IC108
  IC109
IC110
   IC111
                         8-752-340-57 s IC CXK1203Q
8-752-340-57 s IC CXK1203Q
8-759-063-43 s IC CXD8263Q
8-759-063-38 s IC CXD8276Q
8-759-515-08 s IC SN74ALS374AN
   IC113
  IC114
  TC115
  IC116
                          8-759-925-08 s IC SN74ALS174N
8-759-515-08 s IC SN74ALS374AN
8-759-990-59 s IC N74F377N
8-759-990-59 s IC N74F377N
8-752-340-57 s IC CXK1203Q
   IC118
   IC119
   IC120
   IC121
                          8-759-515-08 s IC SN74ALS374AN
8-759-515-08 s IC SN74ALS374AN
8-759-912-03 s IC SN74ALS138N
8-759-901-64 s IC SN74LS164N
8-759-936-53 s IC SN74ALS151N
   IC122
   IC123
   IC201
   IC202
   IC203
                          8-759-900-69 s IC SN74ALS74AN
8-759-900-69 s IC SN74ALS74AN
8-759-925-08 s IC SN74ALS174N
   IC204
   IC205
   IC206
                           1-412-525-31 s INDUCTOR 10uH
  L1
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SP Description



PS1

RB1 RB2 RB3

S2 S3

NOTE: Please see page 8-9 for the parts that are not listed in the parts list.

1-231-410-00 s RESISTOR BLOCK 10Kx8 1-231-410-00 s RESISTOR BLOCK 10Kx8 1-231-533-00 s RESISTOR BLOCK 10Kx4

1-553-925-00 s SWITCH, DIGITAL 1-553-925-00 s SWITCH, DIGITAL 1-554-027-00 s SWITCH, DIGITAL 1-554-027-00 s SWITCH, DIGITAL

1-532-984-11 s LINK, IC 2A

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(KY-223 BOARD)
KY-223 BOARD
                                                                                                                                             Ref. No. or Q'ty Part No.
Ref. No. or Q'ty Part No.
                                                                                                                                                                                           SP Description
                                               SP Description
                    A-8271-686-A O MOUNTED CIRCUIT BOARD, KY-223
2-139-131-01 O HEAT SINK, CON.
2-140-311-04 S KEY TOP
3-177-559-01 O CHIP (A), SW
3-178-140-01 O SPACER
                                                                                                                                                                 8-719-979-87 s LED LD-701MG, GRN
                                                                                                                                             D88
1pc
                                                                                                                                             D90
1pc
                                                                                                                                             D92
6pcs
                                                                                                                                              D93
 1pc
                                                                                                                                                                  8-719-979-87 s LED LD-701MG, GRN
                                                                                                                                              D94
 4pcs
                                                                                                                                                                 8-719-979-87 s LED LD-701MG, GRN
8-719-400-18 s DIODE MA152WK
8-719-109-84 s DIODE RD5.1ES-B1
8-719-030-51 s DIODE LD-010MW
8-719-030-51 s DIODE LD-010MW
                     3-708-563-01 o CAP
4-928-315-01 s KEY TOP
7-682-950-01 s SCREW +PSW 3X12
                                                                                                                                              D95
  2pcs
                                                                                                                                              D101
 21pcs
                                                                                                                                              D102
  1pc
                                                                                                                                              D214
                                                                                                                                              D224
                     1-529-025-00 s BUZZER
 BZ1
                     1-126-948-11 s ELECT 100uF 20% 35V
                                                                                                                                              D235
                                                                                                                                                                  8-719-979-87 s LED LD-701MG, GRN
 C3
C5
                                                                                                                                                                  8-749-920-71 s IC SI3522V
8-759-929-86 s IC SN74LS14NS
8-759-970-26 s IC PST523C
8-759-926-32 s IC AM26LS32PC
                                                                                                                                              ĬC2
  Č7
                      1-124-589-11 s ELECT 47uF 20% 16V
                                                                                                                                              IC3
  C10
                                                                                                                                              ĪČ4
                     1-124-589-11 s ELECT 47uF 20% 16V
1-124-589-11 s ELECT 47uF 20% 16V
1-124-257-00 s ELECT 2.2uF 20% 50V
1-163-145-00 s CERAMIC, CHIP 0.0015uF 5% 50V
1-124-589-11 s ELECT 47uF 20% 16V
                                                                                                                                              ĬC5
                                                                                                                                                                   8-759-926-31 s IC AM26LS31PC
  C61
  C71
                                                                                                                                                                  8-759-926-49 s IC SN74HC245NS
8-759-926-68 s IC SN74HC375ANS
8-795-926-80 s IC SN74HC573BNS
8-795-926-80 s IC SN74HC573BNS
8-752-800-46 s IC CXQ70108P-8
  C123
                                                                                                                                               IC7
  C124
                                                                                                                                              IC8
  C127
                                                                                                                                               ĪC9
                                                                                                                                               ĪC10
                      1-124-589-11 s ELECT 47uF 20% 16V
  C129
                      1-506-699-11 o CONNECTOR, LCSC 26P, MALE
1-506-480-11 s CONNECTOR, 15P, MALE
1-506-480-11 s CONNECTOR, 15P, MALE
1-506-480-11 s CONNECTOR, 15P, MALE
1-506-469-11 s CONNECTOR 4P, MALE
                                                                                                                                                                   8-759-922-49 s IC SN74LS74ANS
                                                                                                                                               IC11
                                                                                                                                                                  8-759-925-78 s IC SN74HC10NS
8-759-926-11 s IC SN74HC138NS
8-759-088-10 o IC 27C256-NPKY14V1.01, EPROM
                                                                                                                                               IC12
  CN2
                                                                                                                                               IC13
  CN3
                                                                                                                                               IC14
  CN<sub>4</sub>
                                                                                                                                                                   8-752-337-81 s IC CXX58257AM-12LL
                                                                                                                                               IC15
  CN5
                                                                                                                                                                   8-752-806-91 s IC CXQ71054P
8-759-107-51 s IC CXQ71051P
8-759-006-95 s IC MC74HC154N
8-759-106-58 s IC UPD7004C
                      1-506-469-11 s CONNECTOR 4P, MALE
1-506-475-11 s CONNECTOR, 10P, MALE
1-506-475-11 s CONNECTOR, 10P, MALE
1-506-469-11 s CONNECTOR 4P, MALE
                                                                                                                                               IC16
  CN6
                                                                                                                                               IC17
IC18
  CN7
   CN8
                                                                                                                                               IC19
  CN9
                                                                                                                                                                   8-759-009-06 s IC MC14052BF
                                                                                                                                               IC20
                      1-526-659-00 o SOCKET, IC 28P
  CNI14
                                                                                                                                                                   8-759-009-06 s IC MC14052BF
                                                                                                                                                                   8-759-009-00 S IC RC140326F
8-759-927-46 S IC SN74HC00NS
8-759-927-23 S IC SN74HCT574NS
8-759-930-93 S IC SN74LS283NS
                       8-719-979-87 S LED LD-701MG, GRN
                                                                                                                                              IC22
IC23
IC24
  D38
  D39
   D40
                                                                                                                                               IC25
   D46
   D47
                                                                                                                                                                   8-759-241-03 s IC TC74HC191AF
                                                                                                                                               IC26
                                                                                                                                               IC27
                        8-719-979-87 s LED LD-701MG, GRN
   D48
                        8-719-979-87 s LED LD-701MG, GRN
                                                                                                                                               IC28
   D50
                       8-719-979-87 S LED LD-701MG, GRN
8-719-979-87 S LED LD-701MG, GRN
8-719-979-87 S LED LD-701MG, GRN
                                                                                                                                               IC29
   D51
                                                                                                                                                IC30
   D52
   D53
                                                                                                                                                                   8-759-241-03 s IC TC74HC191AF
8-759-930-93 s IC SN74LS283NS
8-759-930-93 s IC SN74LS283NS
8-759-925-74 s IC TC74HC04NS
8-759-926-48 s IC SN74HC244NS
                                                                                                                                               IC31
                                                                                                                                               IC32
IC33
                        8-719-979-87 s LED LD-701MG,
                                                                                         GRN
   D54
                       8-719-979-87 S LED LD-701MG, GRN
   D55
                                                                                                                                               IC34
   D56
                                                                                                                                                IC35
   D57
    D58
                                                                                                                                                IC36
                                                                                                                                                                   8-759-926-48 s IC SN74HC244NS
                                                                                                                                                                   8-759-926-48 s IC SN74HC244NS
8-759-926-48 s IC SN74HC244NS
8-759-926-48 s IC SN74HC244NS
8-759-926-48 s IC SN74HC244NS
                                                                                                                                               IC37
                        8-719-979-87 s LED LD-701MG,
   D59
                                                                                                                                               IC38
IC39
                        8-719-979-87 S LED LD-701MG, GRN
8-719-979-87 S LED LD-701MG, GRN
8-719-979-87 S LED LD-701MG, GRN
   D60
    D61
                                                                                                                                                IC40
    D62
                        8-719-979-87 s LED LD-701MG, GRN
    D67
                                                                                                                                                                   8-759-926-48 s IC SN74HC244NS
                                                                                                                                                                   8-759-926-48 s IC SN74HC244NS
8-759-926-11 s IC SN74HC138NS
8-759-006-95 s IC MC74HC154N
8-759-926-48 s IC SN74HC244NS
                                                                                                                                               IC42
IC43
                        8-719-979-87 s LED LD-701MG, GRN
8-719-979-87 s LED LD-701MG, GRN
8-719-979-87 s LED LD-701MG, GRN
    D68
    D69
                                                                                                                                                IC44
    D80
                        8-719-979-87 s LED LD-701MG, GRN
8-719-979-87 s LED LD-701MG, GRN
                                                                                                                                                IC45
    D81
    D82
                                                                                                                                                                   8-759-926-48 s IC SN74HC244NS
8-759-926-82 s IC SN74HC574ANS
                                                                                                                                               IC46
                                                                                                                                               IC47
                        8-719-979-87 s LED LD-701MG, GRN
    D86
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(KY-223 BOARD) (KY-223 BOARD) Ref. No. or Q'ty Part No. Ref. No. or Q'ty Part No. SP Description SP Description 8-759-926-82 s IC SN74HC574ANS 8-759-206-41 s IC TD62083AP 8-759-926-82 s IC SN74HC574ANS 8-759-206-41 s IC TD62083AP 1-216-053-00 s METAL, CHIP 1.5K 5% 1/10W 1-216-053-00 s METAL, CHIP 1.5K 5% 1/10W 1-216-025-00 s METAL, CHIP 100 5% 1/10W 1-216-053-00 s METAL, CHIP 1.5K 5% 1/10W 1-216-097-00 s METAL, CHIP 100K 5% 1/10W R8 **IC49** R9 IC50 R10 IC51 8-759-926-82 s IC SN74HC574ANS R11 IC52 1-216-097-00 s METAL, CHIP 100K 5% 1/10W 1-216-073-00 s METAL, CHIP 10K 5% 1/10W 8-759-926-82 s IC SN74HC574ANS 8-759-930-77 s IC SN74LS247NS 8-759-930-77 s IC SN74LS247NS 8-759-926-82 s IC SN74HC574ANS 8-759-206-41 s IC TD62083AP R12 R14 **IC54** R15 IC55 IC56 R16 R17 IC57 8-759-926-82 s IC SN74HC574ANS 8-759-206-41 s IC TD62083AP 8-759-926-82 s IC SN74HC574ANS 8-759-206-41 s IC TD62083AP 8-759-926-82 s IC SN74HC574ANS 1-216-073-00 s METAL, CHIP 10K 5% 1/10W IC58 R19 IC59 R20 IC60 IC61 R21 R22 IC62 8-759-206-41 s IC TD62083AP 8-759-926-82 s IC SN74HC574ANS 8-759-206-41 s IC TD62083AP 8-759-926-82 s IC SN74HC574ANS 8-759-206-41 s IC TD62083AP 1-216-073-00 s METAL, CHIP 10K 5% 1/10W IC63 R23 R24 IC64 R25 IC65 R26 IC66 R27 IC67 8-759-926-82 s IC SN74HC574ANS 8-759-206-41 s IC TD62083AP 8-759-926-82 s IC SN74HC574ANS 8-759-206-41 s IC TD62083AP 8-759-926-82 s IC SN74HC574ANS 1-216-073-00 s METAL, CHIP 10K 5% 1/10W R28 **IC68** IC69 IC70 R29 R30 R31 IC71 R32 IC72 8-759-930-77 s IC SN74LS247NS 8-759-930-77 s IC SN74LS247NS 8-759-926-82 s IC SN74HC574ANS 8-759-930-77 s IC SN74LS247NS 8-759-926-82 s IC SN74HC574ANS 1-216-073-00 s METAL, CHIP 10K 5% 1/10W R33 **IC73** IC74 R34 IC75 IC76 R35 R36 ĬĊ77 8-759-206-41 s IC TD62083AP 8-759-926-82 s IC SN74HC574ANS 8-759-206-41 s IC TD62083AP 8-759-926-82 s IC SN74HC574ANS 8-759-206-41 s IC TD62083AP 1-216-073-00 s METAL, CHIP 10K 5% 1/10W R38 IC78 R39 IC79 IC80 R40 TC81 R41 IC82 8-759-926-82 s IC SN74HC574ANS 8-759-206-41 s IC TD62083AP 8-759-926-82 s IC SN74HC574ANS 8-759-206-41 s IC TD62083AP 8-759-926-82 s IC SN74HC574ANS 1-216-073-00 s METAL, CHIP 10K 5% 1/10W **IC83** R44 **IC84** R45 IC85 IC86 R46 IC87 R47 1-216-073-00 s METAL, CHIP 10K 5% 1/10W 8-759-206-41 s IC TD62083AP 8-759-907-81 s IC SN74LS221NS 8-759-206-41 s IC TD62083AP 8-759-206-41 s IC TD62083AP **IC88** R49 **IC89** R50 R51 IC90 IC91 R52 1-412-525-31 s INDUCTOR 10uH L1 1-216-073-00 s METAL, CHIP 10K 5% 1/10W R53 8-719-906-41 s LED GL-9D03D, RED R54 ND7 R55 ND8 R56 ND9 R57 ND10 ND11 1-216-073-00 s METAL, CHIP 10K 5% 1/10W 8-719-906-41 s LED GL-9D03D, RED 8-719-906-41 s LED GL-9D03D, RED R59 ND12 R60 ND13 R61 **1-532-637-00 s LINK, IC 1.0A** R62 PS1 1-216-049-00 s METAL, CHIP 1K 5% 1/10W 1-216-043-00 s METAL, CHIP 560 5% 1/10W 1-216-053-00 s METAL, CHIP 1.5K 5% 1/10W 1-216-025-00 s METAL, CHIP 100 5% 1/10W 1-216-073-00 s METAL, CHIP 10K 5% 1/10W R63 R3 R64 R4 R65 R5



(KY-223 BOARD) (KY-223 BOARD)		
Ref. No.	Part No. SP Description	Ref. No. or Q'ty Part No. SP Description
R67 R68 R69 R70 R71	1-216-073-00 s METAL, CHIP 10K 5% 1/10W 1-216-073-00 s METAL, CHIP 10K 5% 1/10W 1-216-041-00 s METAL, CHIP 470 5% 1/10W 1-216-041-00 s METAL, CHIP 470 5% 1/10W 1-216-041-00 s METAL, CHIP 470 5% 1/10W	R126 1-216-033-00 s METAL, CHIP 220 5% 1/10W R127 1-216-033-00 s METAL, CHIP 220 5% 1/10W R128 1-216-033-00 s METAL, CHIP 220 5% 1/10W R129 1-216-033-00 s METAL, CHIP 220 5% 1/10W R130 1-216-033-00 s METAL, CHIP 220 5% 1/10W
R72 R73 R74 R75 R76	1-216-041-00 s METAL, CHIP 470 5% 1/10W 1-216-041-00 s METAL, CHIP 470 5% 1/10W	
R77 R78 R79 R80 R81	1-216-041-00 s METAL, CHIP 470 5% 1/10W 1-216-041-00 s METAL, CHIP 470 5% 1/10W	
R82 R83 R84 R85 R86	1-216-041-00 s METAL, CHIP 470 5% 1/10W 1-216-049-00 s METAL, CHIP 1% 5% 1/10W 1-216-049-00 s METAL, CHIP 1% 5% 1/10W 1-216-097-00 s METAL, CHIP 100% 5% 1/10W 1-216-097-00 s METAL, CHIP 100% 5% 1/10W	R141 1-216-033-00 s METAL, CHIP 220 5% 1/10W R142 1-216-033-00 s METAL, CHIP 220 5% 1/10W R143 1-216-033-00 s METAL, CHIP 220 5% 1/10W R144 1-216-033-00 s METAL, CHIP 220 5% 1/10W R145 1-216-033-00 s METAL, CHIP 220 5% 1/10W
R87 R88 R89 R90 R91	1-216-097-00 S METAL, CHIP 100K 5% 1/10W 1-216-097-00 S METAL, CHIP 100K 5% 1/10W	R146 1-216-033-00 S METAL, CHIP 220 5% 1/10W R147 1-216-033-00 S METAL, CHIP 220 5% 1/10W R148 1-216-033-00 S METAL, CHIP 220 5% 1/10W R149 1-216-033-00 S METAL, CHIP 220 5% 1/10W R150 1-216-033-00 S METAL, CHIP 220 5% 1/10W
R92 R93 R94 R95 R96	1-216-097-00 s METAL, CHIP 100K 5% 1/10W 1-216-097-00 s METAL, CHIP 100K 5% 1/10W	R151 1-216-033-00 s METAL, CHIP 220 5% 1/10W R152 1-216-033-00 s METAL, CHIP 220 5% 1/10W R153 1-216-033-00 s METAL, CHIP 220 5% 1/10W R154 1-216-033-00 s METAL, CHIP 220 5% 1/10W R155 1-216-033-00 s METAL, CHIP 220 5% 1/10W
R97 R98 R99 R100 R101	1-216-097-00 s METAL, CHIP 100K 5% 1/10W 1-216-097-00 s METAL, CHIP 100K 5% 1/10W	R156 1-216-033-00 s METAL, CHIP 220 5% 1/10W R157 1-216-033-00 s METAL, CHIP 220 5% 1/10W R158 1-216-033-00 s METAL, CHIP 220 5% 1/10W R159 1-216-057-00 s METAL, CHIP 220 5% 1/10W R160 1-216-057-00 s METAL, CHIP 2.2% 5% 1/10W
R102 R103 R104 R105 R106	1-216-097-00 s METAL, CHIP 100K 5% 1/10W 1-216-033-00 s METAL, CHIP 220 5% 1/10W 1-216-053-00 s METAL, CHIP 1.5K 5% 1/10W 1-216-053-00 s METAL, CHIP 1.5K 5% 1/10W 1-216-053-00 s METAL, CHIP 1.5K 5% 1/10W	R161 1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W R162 1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W R163 1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W R164 1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W R165 1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W
R107 R108 R109 R110 R111	1-216-053-00 s METAL, CHIP 1.5K 5% 1/10W 1-216-053-00 s METAL, CHIP 1.5K 5% 1/10W	R166 1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W R167 1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W R168 1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W R169 1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W R170 1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W
R112 R113 R114 R115 R116	1-216-053-00 s METAL, CHIP 1.5K 5% 1/10W 1-216-053-00 s METAL, CHIP 1.5K 5% 1/10W	R171 1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W R172 1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W R173 1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W R174 1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W R175 1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W
R117 R118 R119 R120 R121	1-216-053-00 s METAL, CHIP 1.5K 5% 1/10W 1-216-053-00 s METAL, CHIP 1.5K 5% 1/10W	R176 1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W R177 1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W R178 1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W R179 1-216-025-00 s METAL, CHIP 100 5% 1/10W R180 1-216-025-00 s METAL, CHIP 100 5% 1/10W
R122 R123 R124 R125	1-216-053-00 s METAL, CHIP 1.5K 5% 1/10W 1-216-053-00 s METAL, CHIP 1.5K 5% 1/10W 1-216-033-00 s METAL, CHIP 220 5% 1/10W 1-216-033-00 s METAL, CHIP 220 5% 1/10W	R181 1-216-025-00 s METAL, CHIP 100 5% 1/10W R182 1-216-025-00 s METAL, CHIP 100 5% 1/10W R183 1-216-025-00 s METAL, CHIP 100 5% 1/10W R184 1-216-025-00 s METAL, CHIP 100 5% 1/10W

(KY-223 BOARD) (KY-223 BOARD) Ref. No. or Q'ty Part No. Ref. No. or Q'ty Part No. SP Description SP Description 1-216-025-00 s METAL, CHIP 100 5% 1/10W 1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W R245 R186 R246 R187 R247 R188 R248 R189 1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W 1-216-025-00 s METAL, CHIP 100 5% 1/10W R249 R190 R250 R191 R251 R192 R252 R193 R194 1-216-025-00 s METAL, CHIP 100 5% 1/10W 1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W R254 R195 R255 R196 R256 R197 R257 R198 R258 R199 1-216-025-00 s METAL, CHIP 100 5% 1/10W 1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W R200 R260 R201 R261 R202 R262 R203 R263 R204 1-216-025-00 s METAL, CHIP 100 5% 1/10W 1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W 1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W 1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W 1-216-097-00 s METAL, CHIP 100K 5% 1/10W 1-216-097-00 s METAL, CHIP 100K 5% 1/10W R264 R205 R265 R206 R266 R207 R267 R208 R268 R209 1-216-025-00 s METAL, CHIP 100 5% 1/10W 1-216-057-00 s METAL, CHIP 2.2% 5% 1/10W 1-216-121-00 s METAL, CHIP 1M 5% 1/10W 1-216-097-00 s METAL, CHIP 100K 5% 1/10W 1-216-029-00 s METAL, CHIP 150 5% 1/10W 1-216-029-00 s METAL, CHIP 150 5% 1/10W 1-216-029-00 s METAL, CHIP 150 5% 1/10W R269 R210 R270 R211 R271 R212 R272 R213 R273 R214 1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W 1-216-029-00 s METAL, CHIP 150 5% 1/10W R274 R215 R216 R275 R276 R217 R277 R218 R278 R219 1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W 1-216-029-00 s METAL, CHIP 150 5% 1/10W R279 R220 R221 R280 R222 R281 R223 R282 R283 R224 1-216-029-00 s METAL, CHIP 150 5% 1/10W 1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W R284 R225 R285 R226 R286 R227 R228 R287 R229 R288 1-216-029-00 s METAL, CHIP 150 5% 1/10W 1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W R289 R230 R290 R231 R291 R232 R233 R292 R293 R234 1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W 1-216-029-00 s METAL, CHIP 150 5% 1/10W R294 R235 R295 R296 R236 R237 R238 R297 R298 R239 1-216-057-00 s METAL, CHIP 2.2% 5% 1/10W 1-216-029-00 s METAL, CHIP 150 5% 1/10W R299 R240 R300 R241 R301 R242 R302



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(KY-223 BOARD)
(KY-223 BOARD)
                                                                                                                                                 Ref. No. or Q'ty Part No.
Ref. No. or Q'ty Part No.
                                                                                                                                                                                                SP Description
                                                SP Description
                                                                                                                                                                     1-692-348-11 s SWITCH, PUSH
1-571-654-21 s SWITCH, PUSH
                    1-216-053-00 s METAL, CHIP 1.5% 5% 1/10W 1-216-025-00 s METAL, CHIP 100 5% 1/10W 1-216-029-00 s METAL, CHIP 150 5% 1/10W
R303
                                                                                                                                                 S74
R304
R305
                                                                                                                                                 X1
                                                                                                                                                                      1-577-255-11 s OSC, CRYSTAL 8.00 MHz
                    1-223-247-11 s RES, VAR CARBON 10Kx2
1-223-247-11 s RES, VAR CARBON 10Kx2
RV3
RV4
                    1-571-654-21 s SWITCH, PUSH
1-571-654-21 s SWITCH, PUSH
1-571-654-21 s SWITCH, PUSH
1-571-654-21 s SWITCH, PUSH
 S20
 S21
S22
S23
                     1-571-654-21 s SWITCH, PUSH
 S24
                     1-571-653-21 s SWITCH, PUSH
1-571-654-21 s SWITCH, PUSH
 S26
                     1-571-654-21 s SWITCH, PUSH
1-571-654-21 s SWITCH, PUSH
1-571-654-21 s SWITCH, PUSH
 S27
 S28
 S29
                      1-692-347-11 s SWITCH, PUSH
  S30
                     1-571-653-21 s SWITCH, PUSH
1-571-654-21 s SWITCH, PUSH
1-571-653-21 s SWITCH, PUSH
1-571-653-21 s SWITCH, PUSH
 S31
  S32
  S33
  S34
                     1-571-653-21 s SWITCH, PUSH
1-571-654-21 s SWITCH, PUSH
1-571-654-21 s SWITCH, PUSH
1-571-654-21 s SWITCH, PUSH
1-571-654-21 s SWITCH, PUSH
  S35
  S36
  S37
  S38
  S39
                      1-692-347-11 s SWITCH, PUSH
1-692-347-11 s SWITCH, PUSH
1-692-347-11 s SWITCH, PUSH
1-692-347-11 s SWITCH, PUSH
  S40
  S41
  S42
  S43
                       1-692-347-11 s SWITCH, PUSH
  S44
  S45
S46
                       1-692-347-11 s SWITCH, PUSH
                      1-692-347-11 S SWITCH, PUSH

1-692-347-11 S SWITCH, PUSH

1-692-347-11 S SWITCH, PUSH

1-692-347-11 S SWITCH, PUSH

1-692-347-11 S SWITCH, PUSH
   S47
   S48
                       1-571-653-21 s SWITCH, PUSH
1-571-654-21 s SWITCH, PUSH
1-571-654-21 s SWITCH, PUSH
1-571-654-21 s SWITCH DISH
   S50
   $51
$52
                        1-571-654-21 s SWITCH, PUSH
1-571-654-21 s SWITCH, PUSH
   S53
   S54
                       1-692-348-11 s SWITCH, PUSH
1-571-654-21 s SWITCH, PUSH
1-571-654-21 s SWITCH, PUSH
1-692-348-11 s SWITCH, PUSH
1-692-348-11 s SWITCH, PUSH
   S55
   S56
   S57
   S58
   S59
                       1-692-348-11 s SWITCH, PUSH
   S60
   S61
   S62
   S63
   S64
                        1-692-348-11 s SWITCH, PUSH
   S65
                       1-692-348-11 s SWITCH, PUSH
1-692-348-11 s SWITCH, PUSH
1-692-348-11 s SWITCH, PUSH
1-692-348-11 s SWITCH, PUSH
   S66
   S67
   S68
   S69
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1-692-348-11 s SWITCH, PUSH 1-692-348-11 s SWITCH, PUSH 1-692-348-11 s SWITCH, PUSH

\$70 \$71

KY-225 BG	DARD	(KY-225 BOARD)
Ref. No. or Q'ty	Part No. SP Description	Ref. No. or Q'ty Part No. SP Description
1pc 6pcs 6pcs 12pcs	A-8271-687-A O MOUNTED CIRCUIT BOARD, KY-225 2-140-311-04 S KEY TOP 3-178-140-01 O SPACER 4-928-315-01 S KEY TOP	IC24 8-759-930-77 s IC SN74LS247NS IC25 8-759-930-77 s IC SN74LS247NS IC26 8-759-009-06 s IC MC14052BF
C1 C3 C26 C46 C48	1-124-589-11 s ELECT 47uF 20% 16V 1-124-589-11 s ELECT 47uF 20% 16V	ND1 8-719-906-41 s LED GL-9D03D, RED ND2 8-719-906-41 s LED GL-9D03D, RED ND3 8-719-906-41 s LED GL-9D03D, RED ND4 8-719-906-41 s LED GL-9D03D, RED ND5 8-719-906-41 s LED GL-9D03D, RED
CN1 CN2 CN3 CN4 CN5	1-506-480-11 s CONNECTOR, 15P, MALE 1-506-480-11 s CONNECTOR, 15P, MALE 1-506-480-11 s CONNECTOR, 15P, MALE 1-506-469-11 s CONNECTOR 4P, MALE	R1 1-216-097-00 s METAL, CHIP 100K 5% 1/10W R2 1-216-097-00 s METAL, CHIP 100K 5% 1/10W R3 1-216-097-00 s METAL, CHIP 100K 5% 1/10W R4 1-218-097-00 s METAL, CHIP 100K 5% 1/10W
CN6 D6 D7 D8 D9	8-719-979-87 S LED LD-701MG, GRN 8-719-979-87 S LED LD-701MG, GRN 8-719-979-87 S LED LD-701MG, GRN 8-719-979-87 S LED LD-701MG, GRN 8-719-979-87 S LED LD-701MG, GRN	R6 1-216-097-00 S METAL, CHIP 100K 5% 1/10W R7 1-216-097-00 S METAL, CHIP 100K 5% 1/10W R8 1-216-097-00 S METAL, CHIP 100K 5% 1/10W R9 1-216-097-00 S METAL, CHIP 100K 5% 1/10W R10 1-216-097-00 S METAL, CHIP 100K 5% 1/10W
D10 D11 D12 D13 D14	8-719-979-87 S LED LD-701MG, GRN 8-719-979-87 S LED LD-701MG, GRN	R12 1-216-097-00 S METAL, CHIP 100K 5% 1/10W R13 1-216-097-00 S METAL, CHIP 100K 5% 1/10W R14 1-216-097-00 S METAL, CHIP 100K 5% 1/10W
D16 D17 D18 D19 D21 D22	8-719-979-87 s LED LD-701MG, GRN 8-719-979-87 s LED LD-701MG, GRN 8-719-979-87 s LED LD-701MG, GRN 8-719-979-87 s LED LD-701MG, GRN	R34 1-216-073-00 s METAL, CHIP 10K 5% 1/10W R35 1-216-073-00 s METAL, CHIP 10K 5% 1/10W R36 1-216-073-00 s METAL, CHIP 10K 5% 1/10W R37 1-216-073-00 s METAL, CHIP 10K 5% 1/10W R38 1-216-073-00 s METAL, CHIP 10K 5% 1/10W
D23 D24 D26 D27 D28	8-719-979-87 S LED LD-701MG, GRN	R40 1-216-073-00 s METAL, CHIP 10K 5% 1/10W R41 1-216-073-00 s METAL, CHIP 10K 5% 1/10W R42 1-216-073-00 s METAL, CHIP 10K 5% 1/10W R43 1-216-073-00 s METAL, CHIP 10K 5% 1/10W
IC1 IC2 IC3 IC4 IC5	8-759-926-11 s IC SN74HC138NS 8-759-926-11 s IC SN74HC138NS 8-759-926-48 s IC SN74HC244NS 8-759-926-48 s IC SN74HC244NS 8-759-926-48 s IC SN74HC244NS	R44 1-216-073-00 S METAL, CHIP 10K 5% 1/10W R45 1-216-073-00 S METAL, CHIP 10K 5% 1/10W R46 1-216-073-00 S METAL, CHIP 10K 5% 1/10W R47 1-216-073-00 S METAL, CHIP 10K 5% 1/10W R48 1-216-073-00 S METAL, CHIP 10K 5% 1/10W
IC6 IC7 IC8 IC9 IC10	8-759-926-48 s IC SN74HC244NS 8-759-926-82 s IC SN74HC574ANS 8-759-930-77 s IC SN74LS247NS 8-759-930-77 s IC SN74LS247NS 8-759-926-82 s IC SN74HC574ANS	R49 1-216-073-00 S METAL, CHIP 10K 5% 1/10W R51 1-216-073-00 S METAL, CHIP 10K 5% 1/10W R52 1-216-049-00 S METAL, CHIP 1K 5% 1/10W R53 1-216-049-00 S METAL, CHIP 1K 5% 1/10W R54 1-216-097-00 S METAL, CHIP 10OK 5% 1/10W
IC11 IC12 IC13 IC14 IC15	8-759-206-41 s IC TD62083AP 8-759-926-82 s IC SN74HC574ANS 8-759-206-41 s IC TD62083AP 8-759-926-82 s IC SN74HC574ANS 8-759-206-41 s IC TD62083AP	R55 1-216-097-00 s METAL, CHIP 100K 5% 1/10W R56 1-216-097-00 s METAL, CHIP 100K 5% 1/10W R57 1-216-097-00 s METAL, CHIP 100K 5% 1/10W R58 1-216-097-00 s METAL, CHIP 100K 5% 1/10W R59 1-216-097-00 s METAL, CHIP 100K 5% 1/10W
IC16 IC17 IC18 IC19 IC20	8-759-926-82 s IC SN74HC574ANS 8-759-206-41 s IC TD62083AP 8-759-926-82 s IC SN74HC574ANS 8-759-930-77 s IC SN74LS247NS 8-759-930-77 s IC SN74LS247NS	R60 1-216-053-00 s METAL, CHIP 1.5K 5% 1/10W R61 1-216-053-00 s METAL, CHIP 1.5K 5% 1/10W R62 1-216-053-00 s METAL, CHIP 1.5K 5% 1/10W R63 1-216-053-00 s METAL, CHIP 1.5K 5% 1/10W R64 1-216-053-00 s METAL, CHIP 1.5K 5% 1/10W
IC21 IC22 IC23	8-759-926-82 s IC SN74HC574ANS 8-759-206-41 s IC TD62083AP 8-759-926-82 s IC SN74HC574ANS	R65 1-216-053-00 s METAL, CHIP 1.5K 5% 1/10W R66 1-216-053-00 s METAL, CHIP 1.5K 5% 1/10W R67 1-216-053-00 s METAL, CHIP 1.5K 5% 1/10W R68 1-216-053-00 s METAL, CHIP 1.5K 5% 1/10W

DFS-500/8

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(KY-225 BOARD)
(KY-225 BOARD)
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Ref. No. or Q'ty Part No.
                                                                                                                                                                                                                                                                   SP Description
                                                                  SP Description
                                                                                                                                                                                                                                     1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W 1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W
                            1-216-053-00 s METAL, CHIP 1.5K 5% 1/10W 1-216-053-00 s METAL, CHIP 1.5K 5% 1/10W 1-216-053-00 s METAL, CHIP 1.5K 5% 1/10W 1-216-025-00 s METAL, CHIP 100 5% 1/10W 1-216-025-00 s METAL, CHIP 100 5% 1/10W
                                                                                                                                                                                                          R128
                                                                                                                                                                                                          R129
 R70
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 R71
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 R72
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 R73
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                             1-216-025-00 s METAL, CHIP 100 5% 1/10W
1-216-025-00 s METAL, CHIP 100 5% 1/10W
1-216-025-00 s METAL, CHIP 100 5% 1/10W
1-216-025-00 s METAL, CHIP 100 5% 1/10W
1-216-025-00 s METAL, CHIP 100 5% 1/10W
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 R75
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 R76
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  R77
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                              1-216-025-00 s METAL, CHIP 100 5% 1/10W 1-216-025-00 s METAL, CHIP 100 5% 1/10W 1-216-025-00 s METAL, CHIP 100 5% 1/10W 1-216-025-00 s METAL, CHIP 100 5% 1/10W 1-216-025-00 s METAL, CHIP 100 5% 1/10W
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  R79
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  R80
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  R81
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  R82
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                               1-216-025-00 s METAL, CHIP 100 5% 1/10W 1-216-025-00 s METAL, CHIP 100 5% 1/10W 1-216-025-00 s METAL, CHIP 100 5% 1/10W 1-216-025-00 s METAL, CHIP 100 5% 1/10W 1-216-025-00 s METAL, CHIP 100 5% 1/10W
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  R84
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   R85
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R146
   R86
   R87
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                               1-216-025-00 s METAL, CHIP 100 5% 1/10W 1-216-025-00 s METAL, CHIP 100 5% 1/10W 1-216-025-00 s METAL, CHIP 100 5% 1/10W 1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W 1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W
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   R89
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    R90
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    R91
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    R92
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                                1-216-057-00 s METAL, CHIP 2.2% 5% 1/10W 1-216-057-00 s METAL, CHIP 2.2% 5% 1/10W 1-216-057-00 s METAL, CHIP 2.2% 5% 1/10W 1-216-057-00 s METAL, CHIP 2.2% 5% 1/10W 1-216-057-00 s METAL, CHIP 2.2% 5% 1/10W
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    R94
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    R95
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    R96
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    R97
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     R98
                                1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W 1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W
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     R99
                                                                                                                                                                                                            R159
     R100
     R101
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1-223-247-11 s RES, VAR CARBON 10Kx2
     R102
                                                                                                                                                                                                             RV2
    R103
                                                                                                                                                                                                                                        1-571-654-21 s SWITCH, PUSH
                                 1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W
     R104
                                                                                                                                                                                                             S2
     R105
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     R106
     R107
                                   1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W
                                                                                                                                                                                                             S5
     R108
                                  1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W 1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W
                                                                                                                                                                                                                                         1-571-653-21 s SWITCH, PUSH
1-571-653-21 s SWITCH, PUSH
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     R109
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     R110
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1-571-654-21 s SWITCH, PUSH
1-571-653-21 s SWITCH, PUSH
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      R111
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      R112
      R113
                                  1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W 1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W
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1-571-653-21 s SWITCH, PUSH
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      R115
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1-571-653-21 s SWITCH, PUSH
1-571-654-21 s SWITCH, PUSH
                                                                                                                                                                                                             S13
      R116
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      R117
      R118
                                  1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W 1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W
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1-571-654-21 s SWITCH, PUSH
1-571-654-21 s SWITCH, PUSH
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      R119
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      R120
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      R121
      R122
      R123
                                   1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W 1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W 1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W 1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W
      R124
      R125
      R126
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KY-226 BOARD		
Ref. No. or Q'ty	Part No. SP Description	
1pc 4pcs	A-8271-688-A O MOUNTED CIRCUIT BOARD, KY-226 7-685-646-79 s SCREW +BVTP 3X8 TYPE2 N-S	
C1	1-124-589-11 s ELECT 47uF 20% 16V	
CN1	1-506-469-11 s CONNECTOR 4P, MALE	
RV1	1-238-724-11 s RES, VAR(STICK) CARBON 10Kx2	
TE EED D	OADD	
LE-55B B		
Ref. No. or Q'ty	Part No. SP Description	
1pc 4pcs	1-620-338-11 o PRINTED CIRCUIT BOARD, LE-55 3-674-390-00 o HOLDER (B), LED	
CN1	1-506-482-11 s CONNECTOR 3P, MALE	
D3	8-719-812-32 s LED TLY123, YEL 8-719-812-32 s LED TLY123, YEL 8-719-812-32 s LED TLY123, YEL 8-719-812-32 s LED TLY123, YEL	
R1 R2 R3 R4	1-249-408-11 s CARBON 180 5% 1/4W 1-249-408-11 s CARBON 180 5% 1/4W 1-249-408-11 s CARBON 180 5% 1/4W 1-249-408-11 s CARBON 180 5% 1/4W	

Ref. No. or Q'ty	Part No. SP Description	
1pc	A-8271-678-A o MOUNTED CIRCUIT BOARD, MB-385	
28pcs	7-685-871-09 s SCREW +BVTT 3X6 (S)	
CN4	1-563-337-11 s CONNECTOR, DIN 96P, FEMALE	
CN5	1-563-337-11 s CONNECTOR, DIN 96P, FEMALE	
CN6	1-563-337-11 s CONNECTOR, DIN 96P, FEMALE	
CN7	1-563-337-11 s CONNECTOR, DIN 96P, FEMALE	
CN8	1-563-337-11 s CONNECTOR, DIN 96P, FEMALE	
CN9	1-563-337-11 s CONNECTOR, DIN 96P, FEMALE	
CN10	1-563-337-11 s CONNECTOR, DIN 96P, FEMALE	
CN11	1-563-337-11 s CONNECTOR, DIN 96P, FEMALE	
CN12	1-563-337-11 s CONNECTOR, DIN 96P, FEMALE	
CN13	1-563-337-11 s CONNECTOR, DIN 96P, FEMALE	
CN18	1-563-337-11 s CONNECTOR, DIN 96P, FEMALE 1-563-337-11 s CONNECTOR, DIN 96P, FEMALE 1-563-337-11 s CONNECTOR, DIN 96P, FEMALE 1-563-337-11 s CONNECTOR, DIN 96P, FEMALE 1-506-468-11 s CONNECTOR 3P, MALE	
CN23	1-564-241-00 o CONNECTOR, 4P, MALE	
CN24	1-564-241-00 o CONNECTOR, 4P, MALE	
CN25	1-564-242-00 o CONNECTOR, 5P	

MB-385 BOARD



Ref. No. or Q'ty Part No. SP Description
DC
200
C4 1-161-055-00 S CERAMIC 0.022uF 10X 50V C63 1-161-055-00 S CERAMIC 0.022uF 10X 50V C64 1-161-055-00 S CERAMIC 0.022uF 10X 50V C65 1-161-055-00 S CERAMIC 0.022uF 10X 50V C65 1-161-055-00 S CERAMIC 0.022uF 10X 50V C66 1-161-055-00 S CERAMIC 0.022uF 10X 50V C71 1-161-055-00 S CERAMIC 0.022uF 10X 50V C68 1-161-055-00 S CERAMIC 0.022uF 10X 50V C68 1-161-055-00 S CERAMIC 0.022uF 10X 50V C69 1-161-055-00 S CERAMIC 0.022uF 10X 50V C69 1-161-055-00 S CERAMIC 0.022uF 10X 50V C69 1-161-055-00 S CERAMIC 0.022uF 10X 50V C70 1-161-055-00 S CERAMIC 0.022uF 10X 50V C71 1-161-055-00 S CERAMIC 0.022uF 10X 50V C71 1-161-055-00 S CERAMIC 0.022uF 10X 50V C71 1-161-055-00 S CERAMIC 0.022uF 10X 50V C72 1-161-055-00 S CERAMIC 0.022uF 10X 50V C73 1-161-055-00 S CERAMIC 0.022uF 10X 50V C73 1-161-055-00 S CERAMIC 0.022uF 10X 50V C75 1-161-055-00 S CERAMIC 0.022uF 10X 50V C76 1-161-055-00 S CERAMIC 0.022uF 10X 50V C79 1-161-055-00 S CERAMIC
C14 1-161-055-00 S CERAMIC 0.022uF 10X 50V C72 1-161-055-00 S CERAMIC 0.022uF 10X 50V C16 1-161-055-00 S CERAMIC 0.022uF 10X 50V C73 1-161-055-00 S CERAMIC 0.022uF 10X 50V C74 1-161-055-00 S CERAMIC 0.022uF 10X 50V C75 1-161-055-00 S CERAMIC 0.022uF 10X 50V C76 1-161-055-00 S CERAMIC 0.022uF 10X 50V C76 1-161-055-00 S CERAMIC 0.022uF 10X 50V C79 1-161-055-00 S CERAMI
C14 1-161-055-00 S CERAMIC 0.022uF 10X 50V C72 1-161-055-00 S CERAMIC 0.022uF 10X 50V C16 1-161-055-00 S CERAMIC 0.022uF 10X 50V C73 1-161-055-00 S CERAMIC 0.022uF 10X 50V C74 1-161-055-00 S CERAMIC 0.022uF 10X 50V C75 1-161-055-00 S CERAMIC 0.022uF 10X 50V C76 1-161-055-00 S CERAMIC 0.022uF 10X 50V C76 1-161-055-00 S CERAMIC 0.022uF 10X 50V C79 1-161-055-00 S CERAMI
C24 1-161-055-00 S CERAMIC 0.022UF 10% 50V C83 1-161-055-00 S CERAMIC 0.022UF 10% 50V C26 1-161-055-00 S CERAMIC 0.022UF 10% 50V C84 1-161-055-00 S CERAMIC 0.022UF 10% 50V C85 1-161-055-00 S CERAMIC 0.022UF 10% 50V C86 1-161-055-00 S CERAMIC 0.022UF 10% 50V C28 1-161-055-00 S CERAMIC 0.022UF 10% 50V C28 1-161-055-00 S CERAMIC 0.022UF 10% 50V C29 1-161-055-00 S CERAMIC 0.022UF 10% 50V C30 1-161-055-00 S CERAMIC 0.022UF 10% 50V C31 1-161-055-00 S CERAMIC 0.022UF 10% 50V C31 1-161-055-00 S CERAMIC 0.022UF 10% 50V C89 1-161-055-00 S CERAMIC 0.022UF 10% 50V C32 1-161-055-00 S CERAMIC 0.022UF 10% 50V C33 1-161-055-00 S CERAMIC 0.022UF 10% 50V C33 1-161-055-00 S CERAMIC 0.022UF 10% 50V C33 1-161-055-00 S CERAMIC 0.022UF 10% 50V C34 1-161-055-00 S CERAMIC 0.022UF 10% 50V C35 1-161-055-00 S CERAMIC 0.022UF 10% 50V C36 1-161-055-00 S CERAMI
C24 1-161-055-00 S CERAMIC 0.022UF 10% 50V C83 1-161-055-00 S CERAMIC 0.022UF 10% 50V C26 1-161-055-00 S CERAMIC 0.022UF 10% 50V C84 1-161-055-00 S CERAMIC 0.022UF 10% 50V C85 1-161-055-00 S CERAMIC 0.022UF 10% 50V C86 1-161-055-00 S CERAMIC 0.022UF 10% 50V C28 1-161-055-00 S CERAMIC 0.022UF 10% 50V C28 1-161-055-00 S CERAMIC 0.022UF 10% 50V C29 1-161-055-00 S CERAMIC 0.022UF 10% 50V C30 1-161-055-00 S CERAMIC 0.022UF 10% 50V C31 1-161-055-00 S CERAMIC 0.022UF 10% 50V C31 1-161-055-00 S CERAMIC 0.022UF 10% 50V C89 1-161-055-00 S CERAMIC 0.022UF 10% 50V C32 1-161-055-00 S CERAMIC 0.022UF 10% 50V C33 1-161-055-00 S CERAMIC 0.022UF 10% 50V C33 1-161-055-00 S CERAMIC 0.022UF 10% 50V C33 1-161-055-00 S CERAMIC 0.022UF 10% 50V C34 1-161-055-00 S CERAMIC 0.022UF 10% 50V C35 1-161-055-00 S CERAMIC 0.022UF 10% 50V C36 1-161-055-00 S CERAMI
C29 1-161-055-00 s CERAMIC 0.022uF 10% 50V C87 1-161-055-00 s CERAMIC 0.022uF 10% 50V C30 1-161-055-00 s CERAMIC 0.022uF 10% 50V C88 1-161-055-00 s CERAMIC 0.022uF 10% 50V C89 1-161-055-00 s CERAMIC 0.022uF 10% 50V C90 1-161-055-00 s CERAMIC 0.022uF 10% 50V C90 1-161-055-00 s CERAMIC 0.022uF 10% 50V C91 1-161-055-00 s CERAMIC 0.022uF 10% 50V C93 1-161-055-00 s CERAMIC 0.022uF 10% 50V C93 1-161-055-00 s CERAMIC 0.022uF 10% 50V C94 1-161-055-00 s CERAMIC 0.022uF 10% 50V C95 1-161-055-00 s CERAMIC 0.022uF 10% 50V C95 1-161-055-00 s CERAMIC 0.022uF 10% 50V C96 1-161-055-00 s CERAMIC 0.022uF 10% 50V C97 1-161-055-00 s CERAMIC 0.022uF 10% 50V C98 1-161-055-00 s CERAMIC 0.022uF 10% 50V C99 1-161-055-00 s CERAMI
C32 1-161-055-00 S CERAMIC 0.022UF 10% 50V C91 1-161-055-00 S CERAMIC 0.022UF 10% 50V C33 1-161-055-00 S CERAMIC 0.022UF 10% 50V C34 1-161-055-00 S CERAMIC 0.022UF 10% 50V C35 1-161-055-00 S CERAMIC 0.022UF 10% 50V C36 1-161-055-00 S CERAMIC 0.022UF 10% 50V C36 1-161-055-00 S CERAMIC 0.022UF 10% 50V C94 1-161-055-00 S CERAMIC 0.022UF 10% 50V
C95 1-161-055-00 s CERAMIC 0.022uF 10% 50V
C37 1-161-055-00 s CERAMIC 0.022uF 10% 50V C96 1-161-055-00 s CERAMIC 0.022uF 10% 50V C38 1-161-055-00 s CERAMIC 0.022uF 10% 50V C39 1-161-055-00 s CERAMIC 0.022uF 10% 50V C97 1-161-055-00 s CERAMIC 0.022uF 10% 50V C40 1-161-055-00 s CERAMIC 0.022uF 10% 50V C98 1-161-055-00 s CERAMIC 0.022uF 10% 50V C41 1-161-055-00 s CERAMIC 0.022uF 10% 50V C99 1-161-055-00 s CERAMIC 0.022uF 10% 50V C100 1-161-055-00 s CERAMIC 0.0
C42 1-161-055-00 S CERAMIC 0.022uF 10% 50V C101 1-161-055-00 S CERAMIC 0.022uF 10% 50V C43 1-161-055-00 S CERAMIC 0.022uF 10% 50V C44 1-161-055-00 S CERAMIC 0.022uF 10% 50V C45 1-161-055-00 S CERAMIC 0.022uF 10% 50V C103 1-161-055-00 S CERAMIC 0.022uF 10% 50V C46 1-161-055-00 S CERAMIC 0.022uF 10% 50V C103 1-161-055-00 S CERAMIC 0.022uF 10% 50V C104 1-161-055-00 S CERAMIC 0.022uF 10% 50V C105 1-161-055-00 S CERAMIC
C47 1-161-055-00 s CERAMIC 0.022uF 10% 50V C106 1-161-055-00 s CERAMIC 0.022uF 10% 50V C48 1-161-055-00 s CERAMIC 0.022uF 10% 50V C49 1-161-055-00 s CERAMIC 0.022uF 10% 50V C50 1-161-055-00 s CERAMIC 0.022uF 10% 50V C107 1-161-055-00 s CERAMIC 0.022uF 10% 50V C50 1-161-055-00 s CERAMIC 0.022uF 10% 50V C108 1-161-055-00 s CERAMIC 0.022uF 10% 50V C51 1-161-055-00 s CERAMIC 0.022uF 10% 50V C109 1-161-055-00 s CERAMIC 0.022uF 10% 50V C110 1-161-055-00 s CERAMIC 0.022uF 10% 50V C110 1-161-055-00 s CERAMIC 0.022uF 10% 50V C109 1-161-055-00 s CERAMIC

(MY-54 BOARD) (MY-54 BOARD) Ref. No. or Q'ty Part No. Ref. No. or Q'ty Part No. SP Description SP Description 1-161-055-00 s CERAMIC 0.022UF 10% 50V 1-161-055-00 s CERAMIC 0.022UF 10% 50V 1-161-055-00 s CERAMIC 0.022UF 10% 50V 1-124-584-00 s ELECT 100UF 20% 10V 1-124-584-00 s ELECT 100UF 20% 10V 8-752-333-41 s IC CXK54256P-35 8-752-333-41 s IC CXK54256P-35 8-752-333-41 s IC CXK54256P-35 8-752-333-41 s IC CXK54256P-35 IC47 IC48 Č112 C113 **IC49** C120 IC50 8-752-333-41 s IC CXK54256P-35 C121 8-752-333-41 s IC CXK54256P-35 8-752-333-41 s IC CXK54256P-35 8-752-333-41 s IC CXK54256P-35 8-752-333-41 s IC CXK54256P-35 8-759-063-39 s IC CXD8267Q 1-161-055-00 s CERAMIC 0.022UF 10% 50V 1-124-584-00 s ELECT 100UF 20% 10V IC51 C122 IC52 IC53 C123 C124 C125 **IC54** IC55 C126 8-759-063-39 s IC CXD8267Q 8-759-063-40 s IC CXD8266Q 8-759-063-40 s IC CXD8266Q 8-752-333-59 s IC CXX58258SP-35 8-752-333-59 s IC CXX58258SP-35 1-124-584-00 s ELECT 100uF 20% 10V C127 IC57 IC58 IC59 1-506-748-11 o CONNECTOR, DIN 96P, MALE 1-506-748-11 o CONNECTOR, DIN 96P, MALE 1-506-748-11 o CONNECTOR, DIN 96P, MALE CN7 CN8 IC60 CN9 8-752-333-59 s IC CXK58258SP-35 8-759-902-44 s IC SN74LS244N 8-759-902-44 s IC SN74LS244N IC61 IC62 IC2 8-759-902-44 s IC SN74LS244N 8-759-902-44 s IC SN74LS244N 8-759-989-55 s IC SN74ALS244BN ĬĊ3 IC63 IC4 IC5 IC64 **IC65** 8-752-333-59 s IC CXX58258SP-35 8-759-063-39 s IC CXD8267Q 8-759-063-39 s IC CXD8267Q 8-759-063-40 s IC CXD8266Q 8-759-063-40 s IC CXD8266Q 8-759-900-32 s IC SN74LS32N 8-759-901-75 s IC SN74LS175N 8-759-900-32 s IC SN74LS32N 8-759-936-54 s IC SN74ALS175N 8-759-900-04 s IC SN74LS04N IC66 IC67 IC7 IC68 IC8 IC69 ĪC10 IC70 IC11 8-759-936-54 s IC SN74ALS175N 8-759-904-18 s IC SN74ALS00AN 8-759-912-03 s IC SN74ALS138N 8-759-912-03 s IC SN74ALS138N 8-759-901-74 s IC SN74LS174N 8-759-063-40 s IC CXD8266Q 8-759-063-40 s IC CXD8266Q 8-752-333-48 s IC CXK5464AP-35 8-752-333-48 s IC CXK5464AP-35 IC71 IC12 IC72 IC73 IC74 IC13 IC14 IC15 8-752-333-48 s IC CXK5464AP-35 IC16 8-752-333-48 s IC CXK5464AP-35 8-759-901-74 s IC SN74LS174N 8-759-901-74 s IC SN74LS174N 8-759-903-74 s IC SN74LS374N 8-759-063-39 s IC CXD8267Q 8-759-983-24 s IC CXD8033Q IC77 IC78 IC18 IC19 IC79 IC20 **IC80** IC21 8-752-333-48 s IC CXK5464AP-35 8-759-983-24 s IC CXD8033Q 8-759-983-24 s IC CXD8033Q 8-759-997-10 s IC SN74ALS139N 8-759-515-08 s IC SN74ALS374AN 8-759-900-00 s IC SN74LS00N TC81 IC22 IC23 IC24 IC82 IC83 **IC84** IC25 **IC85** IC26 8-752-333-48 s IC CXX5464AP-35 8-752-333-48 s IC CXX5464AP-35 8-752-333-48 s IC CXX5464AP-35 8-759-063-39 s IC CXD8267Q 8-759-063-39 s IC CXD8267Q 8-759-900-32 s IC SN74LS32N 8-759-900-74 s IC SN74LS74AN 8-759-900-08 s IC SN74LS08N 8-759-900-08 s IC SN74LS08N 8-759-900-08 s IC SN74LS08N TC86 IC27 IC28 IC29 **IC87 IC88 IC89** IC30 IC90 IC31 8-759-500-72 s IC SN74ALS157AN 8-759-500-72 s IC SN74ALS157AN 8-759-500-72 s IC SN74ALS157AN 8-759-500-72 s IC SN74ALS157AN 8-759-916-01 s IC SN74ALS153N 8-759-900-08 s IC SN74LS08N 8-759-900-08 s IC SN74LS08N 8-759-900-08 s IC SN74LS08N 8-759-063-40 s IC CXD8266Q 8-759-063-40 s IC CXD8266Q TC91 IC32 IC92 IC33 IC34 IC35 IC93 **IC94** IC95 IC36 8-759-063-40 s IC CXD8266Q 8-759-063-40 s IC CXD8266Q 8-752-333-41 s IC CXK54256P-35 8-752-333-41 s IC CXK54256P-35 8-752-333-41 s IC CXK54256P-35 8-759-903-74 s IC SN74LS374N 8-759-903-74 s IC SN74LS374N 8-759-063-41 s IC CXD8265Q 8-759-063-41 s IC CXD8265Q 8-759-063-41 s IC CXD8265Q IC96 IC37 IC97 IC38 ĪC39 IC98 IC99 IC40 IC100 IC41 8-759-063-41 s IC CXD8265Q 8-759-904-79 s IC 74F00PC 8-759-904-81 s IC 74F08PC 8-759-946-64 s IC SN74ALS04BN 8-752-333-41 s IC CXK54256P-35 8-752-333-41 s IC CXK54256P-35 8-752-333-41 s IC CXK54256P-35 8-752-333-41 s IC CXK54256P-35 IC101 IC102 IC103 IC43 IC44 TC104 IC45

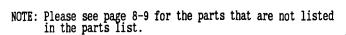
NOTE: Please see page 8-9 for the parts that are not listed in the parts list.

DFS-500/50

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(MY-54 BOARD)
Ref. No. or Q'ty Part No.
                                                  SP Description
                     8-759-946-64 s IC SN74ALS04BN
8-759-500-72 s IC SN74ALS157AN
8-759-903-74 s IC SN74LS374N
8-759-901-75 s IC SN74LS175N
8-759-903-97 s IC SN74LS684N
IC106
 IC107
 IC108
IC109
                     8-759-936-53 s IC SN74ALS151N
8-759-904-83 s IC 74F32PC
8-759-904-83 s IC 74F32PC
8-759-901-64 s IC SN74LS164N
 IC110
 IC111
IC112
                      1-412-525-31 s INDUCTOR 10uH
L1
                  1-532-675-00 s LINK, IC 1.5A 1.5A
 PS1
                      1-249-441-11 s CARBON 100K 5% 1/4W 1-249-441-11 s CARBON 100K 5% 1/4W
 R1
 R2
 R3
 R4
  R5
                       1-249-441-11 s CARBON 100K 5% 1/4W
  R6
                       1-231-411-00 s RESISTOR BLOCK 100Kx8
1-231-411-00 s RESISTOR BLOCK 100Kx8
  RB1
  RB2
RB3
                       1-231-411-00 S RESISTOR BLOCK 100Kx8
  RB4
  RB5
                       1-231-411-00 s RESISTOR BLOCK 100Kx8
  RB6
  RB7
  RB8
  RB10
  RB11
                        1-231-411-00 s RESISTOR BLOCK 100Kx8
  RB12
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PU-78 BO	 ARD
Ref. No. or Q'ty	Part No. SP Description
1pc	A-8271-683-A O MOUNTED CIRCUIT BOARD, PU-78
2pcs	3-166-184-01 O LEVER, PC BOARD
2pcs	3-166-185-01 S NUT, PLATE
1pc	3-178-157-01 O PLATE, SHIELD
8pcs	4-886-821-11 S SCREW, S TIGHT, +PTTWH 3X6
2pcs	7-622-207-05 s N 2.6, TYPE 2
2pcs	7-626-320-11 s PIN, SPRING 3X8
6pcs	7-628-254-40 s SCREW +PS 2.6X12
C1	1-161-055-00 s CERAMIC 0.022uF 10% 50V
C2	1-161-055-00 s CERAMIC 0.022uF 10% 50V
C3	1-161-055-00 s CERAMIC 0.022uF 10% 50V
C4	1-161-055-00 s CERAMIC 0.022uF 10% 50V
C5	1-161-055-00 s CERAMIC 0.022uF 10% 50V
C6	1-161-055-00 s CERAMIC 0.022uF 10% 50V
C7	1-161-055-00 s CERAMIC 0.022uF 10% 50V
C8	1-161-055-00 s CERAMIC 0.022uF 10% 50V
C9	1-161-055-00 s CERAMIC 0.022uF 10% 50V
C10	1-161-055-00 s CERAMIC 0.022uF 10% 50V
C11	1-161-055-00 s CERAMIC 0.022uF 10% 50V
C12	1-161-055-00 s CERAMIC 0.022uF 10% 50V
C13	1-161-055-00 s CERAMIC 0.022uF 10% 50V
C14	1-161-055-00 s CERAMIC 0.022uF 10% 50V
C15	1-161-055-00 s CERAMIC 0.022uF 10% 50V
C16	1-161-055-00 s CERAMIC 0.022uF 10% 50V
C17	1-161-055-00 s CERAMIC 0.022uF 10% 50V
C18	1-161-055-00 s CERAMIC 0.022uF 10% 50V
C19	1-161-055-00 s CERAMIC 0.022uF 10% 50V
C20	1-161-055-00 s CERAMIC 0.022uF 10% 50V
C21	1-161-055-00 s CERAMIC 0.022uF 10% 50V
C22	1-161-055-00 s CERAMIC 0.022uF 10% 50V
C23	1-161-055-00 s CERAMIC 0.022uF 10% 50V
C24	1-161-055-00 s CERAMIC 0.022uF 10% 50V
C25	1-161-055-00 s CERAMIC 0.022uF 10% 50V
C26	1-161-055-00 s CERAMIC 0.022uF 10% 50V
C27	1-161-055-00 s CERAMIC 0.022uF 10% 50V
C28	1-161-055-00 s CERAMIC 0.022uF 10% 50V
C29	1-161-055-00 s CERAMIC 0.022uF 10% 50V
C30	1-161-055-00 s CERAMIC 0.022uF 10% 50V
C31	1-161-055-00 s CERAMIC 0.022uF 10% 50V
C32	1-161-055-00 s CERAMIC 0.022uF 10% 50V
C33	1-161-055-00 s CERAMIC 0.022uF 10% 50V
C34	1-161-055-00 s CERAMIC 0.022uF 10% 50V
C35	1-161-055-00 s CERAMIC 0.022uF 10% 50V
C36	1-161-055-00 s CERAMIC 0.022uF 10% 50V
C37	1-161-055-00 s CERAMIC 0.022uF 10% 50V
C38	1-161-055-00 s CERAMIC 0.022uF 10% 50V
C39	1-161-055-00 s CERAMIC 0.022uF 10% 50V
C40	1-161-055-00 s CERAMIC 0.022uF 10% 50V
C41	1-161-055-00 s CERAMIC 0.022uF 10% 50V
C42	1-161-055-00 s CERAMIC 0.022uF 10% 50V
C43	1-161-055-00 s CERAMIC 0.022uF 10% 50V
C44	1-161-055-00 s CERAMIC 0.022uF 10% 50V
C45	1-161-055-00 s CERAMIC 0.022uF 10% 50V
C46	1-161-055-00 s CERAMIC 0.022uF 10% 50V
C47	1-161-055-00 s CERAMIC 0.022uF 10% 50V
C48	1-161-055-00 s CERAMIC 0.022uF 10% 50V
C49	1-161-055-00 s CERAMIC 0.022uF 10% 50V
C50	1-161-055-00 s CERAMIC 0.022uF 10% 50V

(PU-78 BOARD) (PU-78 BOARD) Ref. No. or Q'ty Part No. SP Description Ref. No. or Q'ty Part No. SP Description 1-161-055-00 s CERAMIC 0.022UF 10% 50V 8-759-989-55 s IC SN74ALS244BN 8-759-989-55 s IC SN74ALS244BN 8-759-989-55 s IC SN74ALS244BN 8-759-989-55 s IC SN74ALS244BN 8-752-322-06 s IC CXK5814P-35 IC20 IC21 IC22 C52 C53 C54 C55 IC23 1-161-055-00 s CERAMIC 0.022uF 10% 50V 8-752-322-06 s IC CXK5814P-35 8-759-983-25 s IC CXD8031Q 8-759-983-25 s IC CXD8031Q 8-759-983-25 s IC CXD8031Q 8-759-983-25 s IC CXD8031Q C56 IC25 C57 IC26 IC27 C58 C59 IC28 C60 1-161-055-00 s CERAMIC 0.022uF 10% 50V 8-759-989-55 s IC SN74ALS244BN 8-759-989-55 s IC SN74ALS244BN 8-759-989-55 s IC SN74ALS244BN 8-752-322-06 s IC CXK5814P-35 8-752-322-06 s IC CXK5814P-35 IC30 C62 C63 IC31 IC32 IC33 C64 C65 1-161-055-00 s CERAMIC 0.022uF 10% 50V 8-759-989-55 s IC SN74ALS244BN C66 IC35 IC36 IC37 C67 C68 C69 IC38 C70 1-161-055-00 s CERAMIC 0.022uF 10% 50V 8-759-989-55 s IC SN74ALS244BN 8-752-324-60 s IC CXK5863P-25 8-752-324-60 s IC CXK5863P-25 8-752-324-60 s IC CXK5863P-25 8-752-324-60 s IC CXK5863P-25 IC39 IC40 IC41 IC42 C72 C73 C74 Č75 IC43 1-124-584-00 S ELECT 100uF 20% 10V 1-124-584-00 S ELECT 100uF 20% 10V 1-161-772-11 S CERAMIC 0.1uF 10% 25V 1-124-584-00 S ELECT 100uF 20% 10V 1-124-584-00 S ELECT 100uF 20% 10V 8-759-989-55 s IC SN74ALS244BN 8-759-989-55 s IC SN74ALS244BN 8-759-989-55 s IC SN74ALS244BN 8-759-989-55 s IC SN74ALS244BN 8-759-500-72 s IC SN74ALS157AN C76 IC44 IC45 IC46 IC47 C77 C78 C79 C80 1-124-584-00 s ELECT 100uF 20% 10V 1-124-584-00 s ELECT 100uF 20% 10V 1-124-584-00 s ELECT 100uF 20% 10V 1-161-055-00 s CERAMIC 0.022uF 10% 50V 1-161-055-00 s CERAMIC 0.022uF 10% 50V 8-759-500-72 s IC SN74ALS157AN 8-759-500-72 s IC SN74ALS157AN 8-759-500-72 s IC SN74ALS157AN 8-759-901-64 s IC SN74LS164N 8-759-904-38 s IC SN74ALS32N C81 IC49 IC50 IC51 IC52 C82 C83 C101 IC53 C102 8-759-904-38 s IC SN74ALS32N 8-759-505-01 s IC CXD8054 8-759-505-01 s IC CXD8054 8-759-063-44 s IC CXD8262Q 8-759-063-44 s IC CXD8262Q 1-161-055-00 s CERAMIC 0.022uF 10% 50V 1-161-055-00 s CERAMIC 0.022uF 10% 50V C103 IC54 IC55 IC56 IC57 C104 1-506-748-11 o CONNECTOR, DIN 96P, MALE 1-506-748-11 o CONNECTOR, DIN 96P, MALE 1-506-748-11 o CONNECTOR, DIN 96P, MALE IC58 CN11 8-759-063-44 s IC CXD8262Q 8-759-063-44 s IC CXD8262Q 8-759-989-55 s IC SN74ALS244BN IC60 8-759-088-19 0 IC PALI6L8-NPPSL61V1.01, PLD 8-759-904-38 s IC SN74ALS32N 8-759-904-38 s IC SN74ALS32N IC2 IC3 IC61 IC62 IC63 IC4 8-759-906-78 s IC 74F399PC 8-759-500-72 s IC SN74ALS157AN 8-759-500-72 s IC SN74ALS157AN 8-759-515-08 s IC SN74ALS374AN 8-759-063-39 s IC CXD8267Q IC64 8-759-946-64 s IC SN74ALS04BN 8-759-945-73 s IC SN74ALS10AN 8-759-912-03 s IC SN74ALS138N 8-759-912-03 s IC SN74ALS138N 8-759-912-03 s IC SN74ALS138N IC6 IC65 ĪČ7 IC66 ĪČ8 IC67 IC68 IC9 8-759-906-78 s IC 74F399PC 8-759-063-39 s IC CXD8267Q 8-759-906-78 s IC 74F399PC 8-759-063-39 s IC CXD8267Q 8-759-906-78 s IC 74F399PC 8-759-904-38 s IC SN74ALS32N 8-759-904-26 s IC SN74ALS08N 8-759-500-72 s IC SN74ALS157AN 8-759-515-08 s IC SN74ALS374AN 8-759-900-69 s IC SN74ALS74AN IC70 IC12 IC13 IC71 IC72 ĪC73 IC14 IC15 8-759-063-39 s IC CXD8267Q 8-759-906-78 s IC 74F399PC 8-759-901-64 s IC SN74LS164N **IC74** 8-759-900-69 s IC SN74ALS74AN 8-759-983-24 s IC CXD8033Q 8-759-063-42 s IC CXD8264Q IC75 IC17 IC101 8-759-901-64 s IC SN74LS164N



(PU-78 BOARD)

Ref. No. or Q'ty Part No. SP Description

IC103 8-759-901-64 s IC SN74LS164N
IC104 8-759-904-38 s IC SN74ALS32N

L1 1-412-525-31 s INDUCTOR 10uH

PS1 1-532-675-00 s LINK, IC 1.5A

RB1 1-231-410-00 s RESISTOR BLOCK 10Kx8
RB2 1-231-410-00 s RESISTOR BLOCK 10Kx8
RB3 1-231-410-00 s RESISTOR BLOCK 10Kx8
S1 1-554-080-00 s SWITCH, DIGITAL
S2 1-554-080-00 s SWITCH, DIGITAL

SY-172/SY-172P BOARD

Ref. No. or Q'ty	Part No. SP Description
1pc	A-8271-682-A O MOUNTED CIRCUIT BOARD, SY-172
	(for DFS-500) A-8271-695-A o MOUNTED CIRCUIT BOARD, SY-172P (for DFS-500P)
2pcs	3-166-184-01 o LEVER, PC BOARD
1pc	3-178-157-01 o PLATE, SHIELD
8pcs	4-886-821-11 s SCREW, S TIGHT, +PTTWH 3X6
4pcs	7-622-207-05 s N 2.6, TYPE 2
2pcs	7-626-320-11 s PIN, SPRING 3X8
4pcs	7-628-254-40 s SCREW +PS 2.6X12
BT1	1-528-202-11 s BATTERY, NICKEL-CADMIUM
C1	1-161-055-00 s CERAMIC 0.022uF 10% 50V
C2	1-161-055-00 s CERAMIC 0.022uF 10% 50V
C3	1-161-055-00 s CERAMIC 0.022uF 10% 50V
C4	1-161-055-00 s CERAMIC 0.022uF 10% 50V
C5	1-161-055-00 s CERAMIC 0.022uF 10% 50V
C6	1-161-055-00 s CERAMIC 0.022uF 10% 50V
C7	1-161-055-00 s CERAMIC 0.022uF 10% 50V
C8	1-161-055-00 s CERAMIC 0.022uF 10% 50V
C9	1-161-055-00 s CERAMIC 0.022uF 10% 50V
C10	1-161-055-00 s CERAMIC 0.022uF 10% 50V
C11	1-161-055-00 s CERAMIC 0.022uF 10% 50V
C12	1-161-055-00 s CERAMIC 0.022uF 10% 50V
C13	1-161-055-00 s CERAMIC 0.022uF 10% 50V
C14	1-161-055-00 s CERAMIC 0.022uF 10% 50V
C15	1-161-055-00 s CERAMIC 0.022uF 10% 50V
C16	1-161-055-00 s CERAMIC 0.022uF 10% 50V
C17	1-161-055-00 s CERAMIC 0.022uF 10% 50V
C18	1-161-055-00 s CERAMIC 0.022uF 10% 50V
C19	1-161-055-00 s CERAMIC 0.022uF 10% 50V
C20	1-161-055-00 s CERAMIC 0.022uF 10% 50V
C21	1-161-055-00 s CERAMIC 0.022uF 10% 50V
C22	1-161-055-00 s CERAMIC 0.022uF 10% 50V
C23	1-161-055-00 s CERAMIC 0.022uF 10% 50V
C24	1-161-055-00 s CERAMIC 0.022uF 10% 50V
C25	1-161-055-00 s CERAMIC 0.022uF 10% 50V
C26	1-161-055-00 s CERAMIC 0.022uF 10% 50V
C27	1-161-055-00 s CERAMIC 0.022uF 10% 50V
C28	1-161-055-00 s CERAMIC 0.022uF 10% 50V
C29	1-161-055-00 s CERAMIC 0.022uF 10% 50V
C30	1-161-055-00 s CERAMIC 0.022uF 10% 50V
C31	1-161-055-00 s CERAMIC 0.022uF 10% 50V
C32	1-161-055-00 s CERAMIC 0.022uF 10% 50V
C33	1-161-055-00 s CERAMIC 0.022uF 10% 50V
C34	1-161-055-00 s CERAMIC 0.022uF 10% 50V
C35	1-161-055-00 s CERAMIC 0.022uF 10% 50V
C36	1-161-055-00 s CERAMIC 0.022uF 10% 50V
C37	1-161-055-00 s CERAMIC 0.022uF 10% 50V
C38	1-161-055-00 s CERAMIC 0.022uF 10% 50V
C39	1-161-055-00 s CERAMIC 0.022uF 10% 50V
C40	1-161-055-00 s CERAMIC 0.022uF 10% 50V
C41	1-161-055-00 s CERAMIC 0.022uF 10% 50V
C42	1-161-055-00 s CERAMIC 0.022uF 10% 50V
C43	1-161-055-00 s CERAMIC 0.022uF 10% 50V
C44	1-161-055-00 s CERAMIC 0.022uF 10% 50V
C45	1-161-055-00 s CERAMIC 0.022uF 10% 50V
C46	1-161-055-00 s CERAMIC 0.022uF 10% 50V

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(SY-172/SY-172P BOARD)
                                                                                                                                                   (SY-172/SY-172P BOARD)
Ref. No. or Q'ty Part No.
                                                                                                                                                   Ref. No.
                                                                                                                                                   or Q'ty Part No.
                                                  SP Description
                                                                                                                                                                                                   SP Description
                    1-161-055-00 s CERAMIC 0.022uF 10% 50V 1-161-055-00 s CERAMIC 0.022uF 10% 50V
                                                                                                                                                                       8-752-803-58 s IC CXQ70116P-10
8-759-902-45 s IC SN74L5245N
8-759-902-45 s IC SN74L5245N
8-759-903-75 s IC SN74L5375N
8-759-903-73 s IC SN74L5373N
                                                                                                                                                   IC9
                                                                                                                                                   IC10
C48
                                                                                                                                                  IC11
IC12
C49
C50
                                                                                                                                                   IC13
C51
                     1-161-055-00 s CERAMIC 0.022uF 10% 50V 1-161-055-00 s CERAMIC 0.022uF 10% 50V
                                                                                                                                                                       8-759-903-73 s IC SN74LS373N
8-759-900-10 s IC SN74LS10N
8-759-502-77 s IC SN74LS139AN
8-759-900-32 s IC SN74LS32N
8-759-900-20 s IC SN74LS20N
                                                                                                                                                  IC14
IC15
IC16
 C52
C53
C54
                                                                                                                                                   IC17
 C55
                                                                                                                                                   IC18
 C56
                                                                                                                                                                       8-759-901-38 s IC SN74LS138N
8-759-901-38 s IC SN74LS138N
8-759-901-38 s IC SN74LS138N
8-759-900-21 s IC SN74LS21N
8-752-328-05 s IC CXK5864BSP-70L
                     1-161-055-00 s CERAMIC 0.022uF 10% 50V
1-161-772-11 s CERAMIC 0.1uF 10% 25V
                                                                                                                                                   IC19
 C57
                                                                                                                                                  IC20
IC21
IC22
 C58
C59
 C60
                                                                                                                                                   IC23
 C61
                      1-161-055-00 s CERAMIC 0.022uF 10% 50V
1-161-772-11 s CERAMIC 0.1uF 10% 25V
1-161-055-00 s CERAMIC 0.022uF 10% 50V
                                                                                                                                                                        8-752-328-05 s IC CWK5864BSP-70L
 C62
                                                                                                                                                  IC25
IC26
IC27
                                                                                                                                                                       8-759-902-44 s IC SN74LS374N
8-759-903-74 s IC SN74LS374N
8-759-903-74 s IC SN74LS374N
 C63
 C64
                      1-124-584-00 s ELECT 100uF 20% 10V
1-161-055-00 s CERAMIC 0.022uF 10% 50V
 C65
                                                                                                                                                                        8-759-900-74 s IC SN74LS74AN
                                                                                                                                                   IC28
 C66
                      1-124-584-00 s ELECT 100uF 20% 10V
                                                                                                                                                                       8-759-903-74 s IC SN74LS374N
8-759-903-74 s IC SN74LS374N
                                                                                                                                                   IC29
  C67
                                                                                                                                                   IC30
  C68
                                                                                                                                                   IC31
IC32
IC33
                                                                                                                                                                       8-759-903-74 s IC SN74LS374N
8-759-903-74 s IC SN74LS374N
8-759-903-74 s IC SN74LS374N
8-759-903-74 s IC SN74LS374N
  C69
  C70
  Č71
                       1-124-584-00 s ELECT 100uF 20% 10V
                      1-124-584-00 s ELECT 100uF 20% 10V
1-161-055-00 s CERAMIC 0.022uF 10% 50V
                                                                                                                                                                       8-759-902-44 s IC SN74LS244N
8-759-902-44 s IC SN74LS244N
  C72
                                                                                                                                                   IC35
IC36
  C73
                                                                                                                                                                       8-759-902-44 s IC SN74LS244N
8-759-902-44 s IC SN74LS244N
8-759-902-44 s IC SN74LS244N
8-759-902-44 s IC SN74LS244N
                       1-506-748-11 o CONNECTOR, DIN 96P, MALE
1-506-748-11 o CONNECTOR, DIN 96P, MALE
                                                                                                                                                   IC37
                                                                                                                                                   IC38
  CN18
                      1-526-659-00 o SOCKET, IC 28P
1-526-660-21 o SOCKET, IC 32P
                                                                                                                                                   IC39
                                                                                                                                                                        8-759-902-44 s IC SN74LS244N
                                                                                                                                                                       8-752-803-58 s IC CXQ70116P-10
8-759-902-45 s IC SN74LS245N
8-759-902-45 s IC SN74LS245N
                                                                                                                                                   IC40
  CNI2
                                                                                                                                                    IC41
  CNI3
                                                                                                                                                   IC42
  CNI4
                                                                                                                                                   IC43
                                                                                                                                                                        8-759-903-75 s IC SN74LS375N
  CNI5
                                                                                                                                                                       8-759-903-73 s IC SN74LS373N
8-759-903-73 s IC SN74LS373N
8-759-901-38 s IC SN74LS138N
8-759-901-38 s IC SN74LS138N
8-759-901-38 s IC SN74LS138N
                                                                                                                                                   TC44
                      1-526-660-21 0 SOCKET, IC 32P
1-526-660-21 0 SOCKET, IC 32P
1-526-660-21 0 SOCKET, IC 32P
                                                                                                                                                   IC45
  CN17
                                                                                                                                                   IC46
  CNI8
                                                                                                                                                    IC47
                                                                                                                                                    IC48
                       8-719-911-19 s DIODE 1SS119
  D1
                      8-759-088-11 o IC 27C256-NPSYS1V1.01, EPROM
8-759-088-12 o IC 27C256-NPSYS2V1.01, EPROM
8-759-088-13 o IC 27C512-NPSYS3V1.01, EPROM
8-759-088-14 o IC 27C512-NPSYS4V1.01, EPROM
8-759-088-15 o IC 27C4001-NTEFC5V1.01, EPROM
(for UC)
8-759-093-64 o IC 27C4001-PLEFC5V3.01, EPROM
(for EK)
                                                                                                                                                                       8-759-900-20 s IC SN74LS20N
8-759-900-32 s IC SN74LS32N
8-752-806-91 s IC CXQ71054P
8-759-105-76 s IC UPD71059C
                                                                                                                                                   IC49
   IC1
  IC2
IC3
                                                                                                                                                    ĪC50
                                                                                                                                                   IC51
IC52
   IC4
                                                                                                                                                    IC53
                                                                                                                                                                        8-759-107-51 s IC CXQ71051P
   IC5
                                                                                                                                                                       8-759-107-51 s IC CXQ71051P
8-759-902-44 s IC SN74LS244N
                                                                                                                                                   IC54
                                                                                                                                                   IC55
                                                                                                                                                                       8-759-902-44 s IC SN74LS244N
8-759-926-32 s IC AM26LS32PC
8-759-926-31 s IC AM26LS31PC
                                                                                                                                                    IC56
                       8-759-088-16 o IC 27C4001-NTEFC6V1.01, EPROM
                                                                                                                                                    IC57
   IC6
                       8-759-093-65 o IC 27C4001-PLEFC6V3.01, EPROM
(for EK)
                                                                                                                                                    IC58
                                                                                                                                                                       8-752-328-05 s IC CXK5864BSP-70L
8-752-328-05 s IC CXK5864BSP-70L
8-752-328-05 s IC CXK5864BSP-70L
8-752-328-05 s IC CXK5864BSP-70L
                                                                                                                                                   IC60
                                                                                                                                                   IC61
                        8-759-088-17 o IC 27C4001-NTEFC7V1.01, EPROM
   IC7
                       (for UC)
8-759-093-66 o IC 27C4001-PLEFC7V3.01, EPROM
                                                                                                                                                    IC62
                                                                                                                                                                        8-759-505-28 s IC MAX691CPE
                                                                                                                                                    IC63
                                                           (for EK)
                                                                                                                                                   IC64
                                                                                                                                                                       8-759-902-44 s IC SN74LS244N
                        8-759-088-18 o IC 27C4001-NTEFC8V1.01, EPROM
   IC8
                        (for UC)
8-759-093-67 o IC 27C4001-PLEFC8V3.01, EPROM
                                                                                                                                                                       1-412-525-31 s INDUCTOR 10uH
                                                           (for EK)
```



(SY-172/SY-172P BOARD)	VR-136 BOARD
Ref. No. or Q'ty Part No. SP Description	Ref. No. or Q'ty Part No. SP Description
PS1 A1-532-675-00 s LINK, IC 1.5A	1pc 1-644-611-11 o PRINTED CIRCUIT BOARD, VR-136
Q1 8-729-195-23 s TRANSISTOR 2SA952	C1 1-124-589-11 s ELECT 47uF 20% 16V C2 1-161-485-00 s CERAMIC 0.1uF 50V
R1 1-249-429-11 s CARBON 10K 5% 1/4W R2 1-249-419-11 s CARBON 1.5K 5% 1/4W R3 1-249-405-11 s CARBON 100 5% 1/4W R4 1-249-419-11 s CARBON 1.5K 5% 1/4W	C3 1-161-485-00 s CERAMIC 0.1uf 50V C4 1-161-485-00 s CERAMIC 0.1uf 50V C5 1-161-485-00 s CERAMIC 0.1uf 50V
R4 1-249-419-11 s CARBON 1.5% 5% 1/4W R5 1-249-419-11 s CARBON 1.5% 5% 1/4W	C6 1-161-485-00 s CERAMIC 0.1uF 50V
R6 1-249-405-11 s CARBON 100 5% 1/4W R7 1-249-419-11 s CARBON 1.5% 5% 1/4W R8 1-249-411-11 s CARBON 330 5% 1/4W	RV1 1-223-247-11 s RES, VAR CARBON 10Kx2 RV2 1-223-247-11 s RES, VAR CARBON 10Kx2
	CN1 1-506-489-11 s CONNECTOR 10P, MALE
RB1 1-235-351-11 s RESISTOR BLOCK 2.2KX4 RB2 1-235-351-11 s RESISTOR BLOCK 2.2KX4 RB3 1-231-410-00 s RESISTOR BLOCK 10KX8 RB4 1-231-410-00 s RESISTOR BLOCK 10KX8	
S1 1-570-674-11 s SWITCH, SLIDE S2 1-554-027-00 s SWITCH, DIGITAL S3 1-570-598-11 s SWITCH, DIP 4-CKT	VR-137 BOARD
\$\overline{33}\$ 1-570-598-11 s SWITCH, DIP 4-CRT X1 1-577-337-11 s OSC, CRYSTAL 10.00 MHz X2 1-577-255-11 s OSC, CRYSTAL 8.00 MHz	Ref. No. or Q'ty Part No. SP Description
AZ 1-577-255-11 5 000, OKIDINI 0.00 IIII	1pc 1-644-612-11 o PRINTED CIRCUIT BOARD, VR-137
VR-135 BOARD	C1 1-124-589-11 s ELECT 47uF 20% 16V C2 1-161-485-00 s CERAMIC 0.1uF 50V C3 1-161-485-00 s CERAMIC 0.1uF 50V C4 1-161-485-00 s CERAMIC 0.1uF 50V C5 1-161-485-00 s CERAMIC 0.1uF 50V
Ref. No.	C6 1-161-485-00 s CERAMIC 0.1uF 50V C7 1-161-485-00 s CERAMIC 0.1uF 50V
or Q'ty Part No. SP Description	C8 1-161-485-00 S CERAMIC 0.1uF 50V C9 1-161-485-00 S CERAMIC 0.1uF 50V
3pcs 1-644-610-11 o PRINTED CIRCUIT BOARD, VR-135	C10 1-161-485-00 s CERAMIC 0.1uF 50V
C1 1-124-589-11 s ELECT 47uF 20% 16V C2 1-161-485-00 s CERAMIC 0.1uF 50V C4 1-161-485-00 s CERAMIC 0.1uF 50V	C11 1-161-485-00 s CERAMIC 0.1uF 50V CN1 1-506-489-11 s CONNECTOR 10P, MALE
C5 1-161-485-00 S CERAMIC 0.1uF 50V	RV1 1-223-247-11 s RES, VAR CARBON 10Kx2
CN1 1-506-483-21 s CONNECTOR, 4P, MALE RV1 1-223-247-11 s RES, VAR CARBON 10Ex2	RV2 1-223-247-11 s RES, VAR CARBON 10Kx2 RV3 1-223-247-11 s RES, VAR CARBON 10Kx2

VR-138 BOARD		FRAME	
Ref. No. or Q'ty	Part No. SP Description	Ref. No. or Q'ty Part No. SP Description	
1pc	1-644-613-11 o PRINTED CIRCUIT BOARD, VR-138	M1 1-541-329-31 s MOTOR, FAN	
C1 C2	1-124-589-11 s ELECT 47uF 20% 16V 1-161-485-00 s CERAMIC 0.1uF 50V	\$101	
C3 C4 C5	C3 1-161-485-00 s CERAMIC 0.1uF 50V 1-161-485-00 s CERAMIC 0.1uF 50V	1pc	
C6 1-161-485-00 s CERAMIC 0.1uF 50V C7 1-161-485-00 s CERAMIC 0.1uF 50V	("CONTROL PANEL" to CN1/KY-223 board) 1pc ★1-580-375-11 s INLET, AC 3P, MALE		
C8 C9 C10	1-161-485-00 s CERAMIC 0.1uF 50V 1-161-485-00 s CERAMIC 0.1uF 50V 1-161-485-00 s CERAMIC 0.1uF 50V	1pc	
C11 C12 C13 C14	1-161-485-00 s CERAMIC 0.1uF 50V 1-161-485-00 s CERAMIC 0.1uF 50V 1-161-485-00 s CERAMIC 0.1uF 50V 1-161-485-00 s CERAMIC 0.1uF 50V	1pc 1-951-147-11 o HARNESS (KY-4) HARNESS'S CHILD PARTS	
CN1	1-506-489-11 s CONNECTOR 10P, MALE	UADNECC VU 1.	
RV1 1-223-247-11 s RES, VAR CARBON 10Kx2 RV2 1-223-247-11 s RES, VAR CARBON 10Kx2 RV3 1-223-247-11 s RES, VAR CARBON 10Kx2 RV4 1-223-247-11 s RES, VAR CARBON 10Kx2	HARNESS KY-1: (CN1F/KY-226 board to CN4F/KY-225 board) (CN1F/KY-135 board to CN6F/KY-225 board) (CN1F/VR-135 board to CN5F/KY-223 board) (CN1F/VR-135 board to CN6F/KY-223 board) Unstock parts		
		HARNESS KY-2: (CN1F/VR-136 board to CN5F/KY-225 board) (CN1F/VR-137 board to CN7F/KY-223 board) (CN1F/VR-138 board to CN8F/KY-223 board) Unstock parts	
		HARNESS KY-3: (CN1F/KY-225 board to CN2F/KY-223 board) (CN2F/KY-225 board to CN3F/KY-223 board) (CN3F/KY-225 board to CN4F/KY-223 board) Unstock parts	
		HARNESS KY-4: (KY-223 board to KY-225 board) 1pc	
		HARNESS DCW-500: (CN1/LE-55B board to CN22/MB-385 board) CN1F 1-569-196-31 o HOUSING 3P 1-569-193-11 o CONTACT, FEMALE CN22F 1-569-196-11 o HOUSING, CONNECTOR 3P 1-569-193-11 o CONTACT, FEMALE	



(INLET 3P to WIRE GROUND)
1DC 1-535-316-11 s TERMINAL, GROUND (M4)

(CN2F/AC-111B board to WIRE GROUND)
1pc A1-535-340-11 o CONTACT

PACKING MATERIALS & SUPPLIED ACCESSORIES

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Ref. No. or Q'ty Part No.
                                                          SP Description
                   ⚠1-534-754-00 s CORD POWER, 2P (for J)
⚠1-557-377-11 s CORD, POWER (for UC)
⚠1-590-910-11 s CORD, POWER 3P (for EK)
1-696-660-11 o CABLE, D-SUB 25P(DIGITAL VIDEO)10m
2-990-242-01 s HOLDER (B), PLUG (for J, UC)
 1pc
 1pc
 1pc
 1pc
                         3-170-078-01 o HOLDER (B), PLUG (for EK)
3-177-560-01 o CHIP (B), SW
3-178-159-01 o INDIVIDUAL CARTON (for J, UC)
3-178-171-01 o CUSHION (INNER)
3-178-172-01 o CUSHION (UPPER)
 1pc
 1pc
  1pc
 1pc
                    3-178-174-01 o CUSHION
3-178-513-01 o INDIVIDUAL CARTON (for EK)
3-701-634-00 o BAG, POLYETHYLENE
3-755-938-01 s MANUAL, INSTRUCTION (for J)
▲3-755-938-21 s MANUAL, INSTRUCTION (for UC, EK)
 1pc
 1pc
 1pc
  1pc
  1pc
                          3-755-938-31 s MANUAL, INSTRUCTION (for UC, 3-755-938-41 s MANUAL, INSTRUCTION (for EK)
 1pc
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8-4. OPTIONAL FIXTURES

OPTIONAL FIXTURES

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J-6035-070-A O PLCC IC EXTRACTION TOOL
J-6186-940-A O EXTENSION BOARD EX-326
J-6031-820-A O MULTI CONNECTOR CABLE (DIBNC)
J-6381-380-A O WULTI CONNECTOR CABLE (DOBNC)
J-6381-380-A O VIDEO CABLE (S-BNC)
1-575-065-11 O 25-PIN CONTROL CABLE (5m)

Standard
Product SOPT HEATER HS-600 (100V)
(117V)
(220V)
(240V)
NOZZLE HS-616 (for HS-600)
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